Release 1.10 John F. Collins Bicomputing Research Unit. Cryptish telephone 2.10 John F. Collins Bicomputing Research Unit. Cryptish telephone 2.10 John F. Collins Bicomputing Research Unit. Cryptish telephone 2.10 John F. Collins Bicomputing Research Unit. Cryptish telephone 2.10 John F. Collins Bicomputing Research Unit. Cryptish telephone 2.10 John F. Collins Bicomputing Research Unit. Cryptish telephone 2.10 John F. Collins Bicomputing Research Unit. Cryptish telephone 2.10 John F. Collins Bicomputing Research Unit. Cryptish telephone 2.10 John F. Collins Bicomputing Research Unit		ט ָט
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### 10 John F. Collins, Biocomputing Research Unit. Distribution Titles by Interligence U.K.	**************************************	υ
Tue Apr 7 22:01:29 1998; MasPar time 14.40 Seconds Tue Apr 7 22:01:29 1998; MasPar time 14.40 Seconds Tue Apr 7 22:01:29 1998; MasPar time 14.40 Seconds 153-29 fcm 5441104.seq 163-29 fcm 5441104.seq 164-29 fcm 5441104.seq 165-29 fcm 545-29 fcm 545-29 fcm 545-29 fcm 545-29 fcm 545-29 fcm 545-29 fcm 645-29 fcm 645-29 fcm 645-29 fcm 65-29 fcm 65-2	.1D John F. Collins, Biocomputing Research Unit. (c) 1993, 1994, 1995 University of Edinburgh, U. istribution rights by IntelliGenetics, Inc.	υ
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157-219] from 5341104.seq 158-219] from 541104.seq 158-219] from 541104.se	output not generated.	.
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### Mean 6.962; Variance 3.685; scale 1.889 No. is the number of results predicted by chance to have a greater than or equal to the score of the result being printed, CC	e: n-issued 1:backl 2:51 3:52 4:53 5:54 6:55 7:56 8:57 9:PCT90 10:PCT91 11:PCT92 12:PCT93 13:PCT94 14:PCT95 15:PCT9	88888
## Score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution. ** SUMMARIES SCORE Match Length DB ID Description Pred. No. 163 100.0 5674 6 US-08-299 Sequence 8, Applicatio 9.26e-108 163 100.0 5674 4 US-07-807 Sequence 9, Applicatio 9.26e-108 163 100.0 5674 4 US-07-807 Sequence 9, Applicatio 1.21e-36 17 43.6 4157 7 US-08-299 Sequence 9, Applicatio 1.21e-36 18 17.2 215 6 US-08-299 Sequence 9, Application 1.21e-36 19 662 7 US-08-299 Sequence 9, Application 1.21e-36 22 13.5 10.6 55.7 US-08-238 Sequence 5, Application 1.60e-02 22 13.5 14 PCT-US95-1 Sequence 5, Application 1.60e-02 22 13.5 10.5 10.7 US-08-232 Sequence 13, Application 1.60e-02 22 13.5 10.5 10.7 US-08-132 Sequence 14, Application 1.60e-02 22 13.5 10.5 10.7 US-08-132 Sequence 14, Application 1.28e-01 20 12.3 12.9 US-08-232 Sequence 14, Application 2.28e-01 20 12.3 12.5 US-08-232 Sequence 14, Application 2.28e-01 21 12.9 US-08-232 Sequence 14, Application 2.28e-01 22 13.5 US-08-232 Sequence 14, Application 2.28e-01 23 12.5 US-08-232 Sequence 14, Application 2.28e-01 24 US-08-232 Sequence 14, Application 2.28e-01 25 US-08-232 Sequence 14, Application 2.28e-01 26 US-08-232 Sequence 14, Application 2.28e-01 27 US-08-232 Sequence 14, Application 2.28e-01 28 US-08-232 Sequence 14, Application 2.28e-01 29 US-08-290 Sequence 14, Application 2.28e-01 29 US-08-2	: Mean 6.962; Variance 3.685; scale 1	J " E
SCORE MATCH LENGTH DB ID Description Pred. No. Score Match Length DB ID Description Pred. No. 163 100.0 5674 7 US-08-199- Sequence 1, Applicatio 9.26e-108 163 100.0 5674 4 US-07-807- Sequence 1, Applicatio 9.26e-108 163 100.0 5674 4 US-07-807- Sequence 8, Applicatio 9.26e-108 71 43.6 4157 4 US-07-807- Sequence 9, Applicatio 1.21e-36 70 42.9 662 7 US-08-299- Sequence 10, Applicatio 1.21e-36 71 43.6 6457 105-08-299- Sequence 10, Applicatio 6.74e-36 72 13.5 6 US-07-807- Sequence 5, Applicatio 6.74e-36 73 19.6 215 6 US-07-807- Sequence 5, Applicatio 1.60e-02 74 148 7 US-08-238- Sequence 5, Applicatio 1.60e-02 75 148 7 US-08-238- Sequence 13, Applicatio 1.60e-02 76 148 7 US-08-702- Sequence 14, Applicatio 1.60e-02 77 15 18 18 US-08-232- Sequence 14, Applicatio 1.28e-01 78 19.6 218 US-08-218- Sequence 14, Applicatio 2.28e-01 79 12.3 7218 7 US-08-218- Sequence 142, Applicatio 2.28e-01 70 12.3 7218 7 US-08-212- Sequence 142, Application 2.28e-01 70 12.3 7218 7 US-08-212- Sequence 142, Application 2.28e-01 78 11.7 66 7 US-08-212- Sequence 144, Application 2.28e-01 79 11.7 66 7 US-08-212- Sequence 144, Application 2.28e-01 70 12.3 7218 7 US-08-212- Sequence 144, Application 2.28e-01 70 12.3 7218 7 US-08-212- Sequence 144, Application 2.28e-01 70 12.3 7218 7 US-08-212- Sequence 144, Application 2.28e-01	No. is the number of results predicted by chance greater than or equal to the score of the result sterived by analysis of the total score distribut	38888
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1 22 13.5 75 14 PCT-US95-1 Sequence 97, Application 1.60e-02 2 13.5 75 14 PCT-US95-1 Sequence 97, Application 1.60e-02 2 13.5 13.5 82 14 PCT-US95-1 Sequence 17, Application 1.60e-02 2 13.5 105 5 US-07-865- Sequence 13, Application 1.60e-02 2 13.5 13.5 448 7 US-08-702- Sequence 14, Application 1.60e-02 2 12.3 69 7 US-08-71- Sequence 142, Application 1.60e-02 2 12.3 1205 8 US-08-518- Sequence 142, Application 2.28e-01 1205 8 US-08-518- Sequence 142, Application 2.28e-01 1205 8 US-08-518- Sequence 144, Application 2.28e-01 11.7 66 7 US-08-71- Sequence 144, Application 1.28e-01 11.7 66 7 US-08-71- 11.7 68 US-08-71- 11.7	70 42.9 662 4 US-07-807- Sequence 10, Applicati 32 19.6 215 6 US-08-238- Sequence 5, Applicatio 28 17 2 215 6 US-08-38- Sequence 5, Applicatio	388
2 13.5 105 5 UG-07-865- Sequence 13, Applicati 1.60e-02 4 21 12.9 448 7 UG-08-702- Sequence 7, Applicati 1.00e-02 4 21 12.9 7 UG-08-23- Sequence 14, Applicati 5.10e-02 5 20 12.3 69 7 UG-08-471- Sequence 142, Applicat 2.28e-01 6 20 12.3 114 PCT-UGS5-1 Sequence 98, Applicati 2.28e-01 7 20 12.3 1205 8 UG-08-518- Sequence 14, Applicati 2.28e-01 8 20 12.3 7218 7 UG-08-23- Sequence 14, Applicati 2.28e-01 9 11.7 66 7 UG-08-471- Sequence 144, Applicati 8.27e-01	2 17: 75 14 PCT-US95-1 Sequence 97, Application 22 13:5 82 14 PCT-US95-1 Sequence 97, Application 25 14 PCT-	888
4 21 12.9 7218 7 US-08-222 Sequence 142, Applicat 0.11e-02 5 20 12.3 69 7 US-08-471- Sequence 142, Applicat 2.28e-01 6 20 12.3 81 14 PCT-US95-1 Sequence 98, Applicati 2.28e-01 7 20 12.3 1205 8 US-08-518- Sequence 36, Applicati 2.28e-01 8 20 12.3 7218 7 US-08-232- Sequence 14, Applicat 2.28e-01 9 11.7 66 7 US-08-471- Sequence 144, Applicat 8.27e-01	2 22 13.5 105 5 US-07-865- Sequence 13, Applicati 3 22 13.5 448 7 US-08-702- Sequence 7, Applicatio	ខមន
7 20 12.3 1205 8 US-08-518- Sequence 36, Applicati 2.28e-01 8 20 12.3 7218 7 US-08-232- Sequence 14, Applicati 2.28e-01 9 11.7 66 7 US-08-471- Sequence 144, Applicat 8.27e-01	4 21 12.9 /218 / US-U8-232- Sequence 14, Applicati 5 20 12.3 69 7 US-08-471- Sequence 142, Applicat 6 20 12.3 81 14 PCT-US95-1 Sequence 98, Applicati	
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Sequence 1, Application US/08190411A
Sequence 1, Application US/08190411A
Sequence 1, Application US/08190411A
Sequence 1, Application US/08190411A
GENERAL INFORMATION:
APPLICANT: Chen, Yac-Tseng, Stockert, Elisabeth;
APPLICANT: Chen, Yachi; Garin-Chesa, Pilar; Rettig, Wolfgang J.;
APPLICANT: van der Bruggen, Pierre; Boon-Falleur, Thierry;
APPLICANT: Old, Lloyd J.
TILLE OF INVENTION: MONOCLONAL ANTIBODIES WHICH BIND TO
TILLE OF INVENTION: TUMOR REJECTION ANTIGEN PRECURSOR MAGE-1, RECOMBIN
                                                                                                                                                                                                                                                                                                         57 ACCCATCCAAACATCTTCACGCTCACCCCCAGCCCAAGCCAGGCAGAATCCGGTTCCACC 116
                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                  Length 5674;
                                                                                                                                                                                                                    NAME/KEY: MAGE-1 gene
Sequence 5674 BP; 1276 A; 1644 C; 1569 G; 1185 T; 0 other;
                                                                                                                                                                                                                                                                        0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                            177 GIGGITAGAGAGAAGCGAGGITTTCGGTCTGAGGGGCGGCTTG 219
                                                                                                                                                                                                                                                 / Match 100.0%; Score 163; DB 7; Le Local Similarity 100.0%; Pred. No. 9.26e-108; nes 163; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-190-411A-1 STANDARD; DNA; UNC; 5674 BP.
                PRIOR APPLICATION UNEBER: 97011 1711
PRIOR APPLICATION NUMBER: 07/705,702
FILING DATE: 23.489-1991
ATTORNEY/AGENT INFORMATION:
NAME: Hanson, No. 5612201man D.
REGISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: 10D 5355
TELECOMMUNICATION INFORMATION:
TELEFAN: (212) 688-9200
TELEFAN: (212) 688-9200
TELEFAN: (212) 838-3884
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 5674 base pairs
TYPE: nucleic acid
STRANDENESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08/190,411A FILING DATE: 01-FEBRUARY-1994
APPLICATION NUMBER: 07/728,838 APPLICATION NUMBER: 9-JULY-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
CITY: New York
STATE: New York
                                                                                                                                                                                   TOPOLOGY: linear MOLECULE TYPE: genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM
OPERATING SYSTEM: PC-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Wordperfect CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR' APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CIT..
STATE: New .
STATE: 10022
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TITLE OF INVENTION: Tumor Rejection Antigen Precursors, Tumor
TITLE OF INVENTION: Rejection Antigens and Uses Thereof
NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
ADDRESSE: Felfe & Lynch
STREET: 805 Third Avenue
CITY: New York City
STATE: New York
ZIP: 10022
ZIP: 10022
ZIP: 10022
ZIP: Diskette, 5.25 inch, 360 kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 100.0%; Score 163; DB 6; Length 5674; Best Local Similarity 100.0%; Pred. No. 9.26e-108; Matches 163; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: MAGE-1 gene
Sequence 5674 BP; 1276 A; 1644 C; 1569 G; 1185 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             177 GTGGTTAGAGAGAAGCGAGGTTTTCGGTCTGAGGGGCGGCTTG 219
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US-07-807-043B-8 STANDARD; DNA; UNC; 5674 BP
               FILING DATE: 26 MARCH-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/04354
FILING DATE: 22-MAY-1992
PRIOR APPLICATION DATA: 7/807,043
APPLICATION NUMBER: 07/807,043
FILING DATE: 12-DECEMBER-1991
PRIOR APPLICATION DATA: APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION NUMBER: 07/728,838
APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION NUMBER: 07/705,702
FILING DATE: 23-MAY-1991
ATTORNEY,AGENT INFORMATION:
ANAWE: HANSON, NO. 5541104man D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Hanson, No. 5541104man D. REGIGSTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 5354
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 688-9200
TELEPHONE: (212) 838-3884
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACIERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 8, Application US/07807043B. Sequence 8, Application US/07807043B Patent No. 5342774
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 5674 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER:
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Isolated Nucleic Acid Molecules Useful In
Determining Expression Of A Tumor Antigen Precurso
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001-JAN-1900

01-JAN-1900

Sequence 9, Application US/08299849B.

Sequence 9, Application US/08299849B

Sequence 9, Application US/08299849B

Patent No. 561201

GENERAL INFORMATION:
APPLICANT: De Plaen, Etienne; Boon-Falleur, Thierry;
APPLICANT: Leth, Bernard; Szikora, Jean-Pierre; De Smet, Charles; APPLICANT: Chomez, Patrick
APPLICANT: APPLICANT: Destarion Silver Nucleic Acid Molecules Useful In
TITLE OF INVENTION: Determining Expression Of A Tumor Antigen Prect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       63 ACGG-GCCCGGATGTGACGCCCACTGCACTTGGAGGTCAGAGGACAGCGAGATTC 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 CATCCAGATCCCCATCCGGGCAGAATCCGGTTCCACCCTTGCCGTGAACCCAGGGAAGTC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 4157;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches 31; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: MAGE-2 gene
Sequence 4157 BP; 953 A; 1134 C; 1185 G; 885 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Diskette, 5.25 inch, 360 kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 71; DB 4; L
Pred. No. 1.21e-36;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-299-849B-9 STANDARD; DNA; UNC; 4157 BP.
                                                                                                                                                                                                                                             ALIGNATION NO. 5342774man D. REGISTRATION NUMBER: 30,946
REGISTRATION NUMBER: 10D 253.3
TELECOMMUNICATION INFORMATION:
TELEPHONE: (712) 688-9200
TELEPHONE: (712) 688-9200
TELEPHONE: (212) 888-3884
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 4157 base pairs
TYPE: NUCLEIC ACID
                US/07/807,043B
                                            CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION NUMBER: 07/728,838
FILING DATE: 9-JULY-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/728,838
FILING DATE: 3-JULY-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear
MOLECULE TYPE: genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 48
CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OPERATING SYSTEM: PC-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              122 TCGCCCTGAGCAACGCCTG 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  200 TCGTCTGAGGGCGCGCTTG 219
CURRENT APPLICATION DATA:
                               19911212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 77.1%;
Matches 10%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 10022
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: New York City STATE: New York ZIP: 10022
              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IBM
                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <sup>1</sup>88888888888888
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Sequence 9, Application US/07807043B.

Sequence 9, Application US/07807043B.

C Patent No. 534274

GENERAL INFORMATION:

C APPLICANT: Boon, Thierry, Van den Eynde, Beno t
    TITLE OF INVENTION: Rejection Antigen Precursors, Tumor TITLE OF INVENTION: Rejection Antigens and Uses Thereof NUMBER OF SEQUENCES: 16

CORRESPONDENCE ADDRESS: ADDRESS: ADDRESSE: Felfe & Lynch
STREET: 805 Third Avenue
CITY: New York City

STATE: New York City

CLTP: 10022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         57 ACCCATCCAACATCTTCACGCTCACCCCCAGCCCAAGCCAGGCAGAATCCGGTTCCACC 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 5674;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: MAGE-1 gene
Sequence 5674 BP; 1276 A; 1644 C; 1569 G; 1185 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
COMPUTER: IBM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               177 GTGGTTAGAGAGAAGCGAGGTTTTCGGTCTGAGGGGCGCTTG 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    177 GIGGITAGAGAGAGAGCGAGGITITCGGTCTGAGGGGCGCGTTG 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 163; DB 4; Le
Pred. No. 9.26e-108;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          77 4
US-07-807-043B-9 STANDARD; DNA; UNC; 4157 BP
                                                  APPLICATION NUMBER: US/07/807,043B FILING DATE: 19911212
                                                                                                                                                                                                                                                                                                                           LUD 253.3
                                                                                                                    APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/728,838
FILING DATE: 9-JULY-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/705,702
FILING DATE: 23-May-1991
ATTONEY/AGENT INFORWATION:
NAME: HANSON, NO. 5342774man D.
REGISTRATION NUMBER: 30,946
                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: LU
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
OPERATING SYSTEM: PC-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OPERATING SYSTEM: PC-DOS SOFTWARE: Wordperfect
                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 5674 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: singular
                                 CURRENT APPLICATION DATA:
              Wordperfect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 163; Conservative
                                                                                                       PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                       CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JAN-1900
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COMPUTER READABLE FORM: MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: MAGE-21 gene
Sequence 662 BP; 155 A; 244 C; 176 G; 87 T; 0 other;
                                                                                                                                                                           FILING DATE: 1. SEPTEMBER-1994
CLASSIFICATION: 435
PRIOR APPLICATION: 435
PRIOR APPLICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/037,230
FILING DATE: 26-MARCH-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/04354
FILING DATE: 12-MAY-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/80,704
FILING DATE: 12-DECEMBER-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION NUMBER: 9-JULY-1991
ATTORNEY/AGENT INFORMATION:
NAME: HARSON, NO. 5612201man D.
REGISCHRATION NUMBER: 10D 5355
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                        SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/299,849B
FILING DATE: 1-SEPTEMBER-1994
             SSSEE: Felfe & Lynch
ST: 805 Third Avenue
New York City
S: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
                                                                                                              COMPUTER: IBM
OPERATING SYSTEM: PC-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 662 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                   10022
                ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   134 GCCTG 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             215 GCTTG 219
                          STREET:
                                                      STATE:
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Sequence 10, Application US/08299849B
Patent No. 5612201
GENERAL INFORMATION:
APPLICANT: De Plaen, Etienne; Boon-Falleur, Thierry;
APPLICANT: Chomez, Patrick
APPLICANT: Chomez, Patrick
TITLE OF INVENTION: Isolated Nucleic Acid Molecules Useful In
TITLE OF INVENTION: Determining Expression Of A Tumor Antigen Precurso
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               80 CACCCCCAGCCCAAGCCAGGCAGGCAGATCCGGTTCCACCCTGCTCTCAACCCAGGGAAGCC 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 CATCCAGATCCCCATCCGGGCAGAATCCGGTTCCACCCTTGCCGTGAACCCAGGGAAGTC 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 71; DB 7; Length 4157;
Pred. No. 1.21e-36;
0; Mismatches 31; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: MAGE-2 gene
Sequence 4157 BP; 953 A; 1134 C; 1185 G; 885 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-299-849B-10 STANDARD; DNA; UNC; 662 BP
                                                         CLASSIFICATION: 4.2.
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/037,230
FILING DATE: 26-MARCH-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/04354
FILING DATE: 22-MAY-1992
PRIOR APPLICATION DATA: 12-DECEMBER-1991
PRIOR APPLICATION DATA: 07/807,043
FILING DATE: 12-DECEMBER-1991
PRIOR APPLICATION DATA: 364
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION DATA: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION DATA: 364
FILING DATE: 23-MAY-1991
ATTORNEY, AGENT INFORMATION:
NAME: HARSON, NO. 5612201man D.
REGISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: 30,946
REFERENCE/DOCKET NUMBER: 30,946
REFERENCE/DOCKET NUMBER: 30,946
REFERENCE/DOCKET NUMBER: 10D 5355
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 688-9200
TELECOMMUNICATION SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENDTH: 4157 base pairs
             CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/299,849B
FILING DATE: 1-SEPTEMBER-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122 TCGCCCTGAGCAACGCCCTG 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  200 reservicaseseseserre 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ouery Match 43.6%;
Best Local Similarity 77.1%;
Matches 108; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: nucleic acid
STRANDEDNESS: single
                                                      CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
 SOFTWARE:
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01-JAN-1900
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                                                                                                                                                                                                                95 CCAGGCAGAATCCGGTTCCACCCCTGCTCTCAACCCCAGGAAGCCCAGGTGCCCAGATGT 154
                                                                                             15 CCAGGAAGAATCCAGTTCCACCCTGCTGTGAACCCCAGGGAAGTCACGGGGCCG-GATGT 73
                                                     1; Gaps
                                                 0; Mismatches 24; Indels
       Length 662;
Query Match 42.9%; Score 70; DB 7; L. Best Local Similarity 80.0%; Pred. No. 6.74e-36; Matches 100; Conservative 0; Mismatches 24
                                                                                                                                                                                                                                                                                                                                                                                                               US-07-807-043B-10 STANDARD; DNA; UNC; 662 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JAN-1900
Sequence 10, Application US/07807043B
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ID US
AC xx
DT 01
DE Se
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APPLICANT: BENNETT, Alan
APPLICANT: LABAVITCH, John M.
APPLICANT: LABAVITCH, John M.
APPLICANT: STOTZ, Henrik
APPLICANT: STOTZ, Henrik
TITLE OF INVENTION: PLANT INHIBITORS OF FUNGAL
TITLE OF INVENTION: POLYGALACTURONASES AND THEIR USE TO CONTROL FUNGAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 5, Application US/08238163.
Sequence 5, Application US/08238163
Sequence 5, Application US/08238163
Sequence 5, Application US/08238163
Sequence 5, Application US/08238163
Sequence 5, Application:
APPLICANT: BENNETT, Alan
APPLICANT: LABAVITCH, John M.
APPLICANT: PARTICH, Ann
APPLICANT: PARTICH, Ann
APPLICANT: PARTICH INHIBITORS OF FUNGAL
TITLE OF INVENTION: POLYGALACTURONASES AND THEIR USE TO CONTROL FUNGAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96 DSYNASGTSSSNGGTDGNRSGADSYGSSKTAMTSRNRTGKTANNAVDSRNMGDASVGSDK 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: misc_feature
LOCATION: 1..215
OTHER INCRMATION: /Standard_name= "Deduced amino acid
OTHER INFORMATION: sequence of PGIP from bean."
Sequence 215 BP; 15 A; 8 C; 25 G; 26 T; 141 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 215;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 19.6%; Score 32; DB 6; Length 215; Best Local Similarity 17.6%; Pred. No. 8.46e-09; Matches 15; Conservative 37; Mismatches 33; Indels
                                                                                                                                                                                                                                                                                                                                                                                         OURTWART APPLICATION DATA:
CURRENT APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE: 03-MAY-1994
CLASSIFICATION: 800
ATTORNEY/AGENT INFORMATION:
NAME: Bastian, Kevin L.
REGISTRATION NUMBER: 34,774
REFERENCE/DOCKET NUMBER: 2307E-540
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION: 415) 543-5600
TELECOMMUNICATION: 5:
SEQUENCE CRRACTERISTICS:
LENGTH: 215 base pairs
TYPE: nucleic acid
STRANDENESS: single
TOPOLOGY: unknown
MULECULE TYPE: protein
                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend Khourie and Crew STRET: Steurt Street Tower, One Market Plaza CITY: San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-238-163-5 STANDARD; DNA; UNC; 215 BP
                                                                                                                                                                                                                                                                               COUNTRY: US
ZIP: 94105-1493
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              156 NTKKHAKNSADGKVGSKNNGDRNNR 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       103 TCTGCCTGGCTTGGGCTGGA 79
                                                                                                                                                             NUMBER OF SEQUENCES:
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-JAN-1900
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                                                                                                                                         DISEASE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15 CCAGGAAGAATCCAGTTCCACCCTGCTGTGAACCCAGGGAAGTCACGGGGCCG-GATGT 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Gaps
                                                   APPLICANT: BOOK, Thierry, Van den Eynde, Beno t
TITLE OF INVENTION: Tumor Rejection Antigen Precursors,
TITLE OF INVENTION: Rejection Antigens and Uses Thereof
NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
CITY: New York City
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 70; DB 4; Length 662;
Pred. No. 6.74e-36;
0; Mismatches 24; Indels
                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage COMPUTER: IBM
OPERATING SYSTEM: PC-DOS
SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION 19911212
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: MAGE-21 gene
Sequence 662 BP; 155 A; 244 C; 176 G; 87 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JT 8
US-08-238-163-5 STANDARD; DNA; UNC; 215 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LUD 253.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION DATA:
PRIOR APPLICATION UNBER: 07/728,838
FILING DATE: 9-JULY-1991
PRIOR APPLICATION NUMBER: 07/705,702
FILING DATE: 23-MAY-1991
ATTORNEY,AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Hanson, No. 5342774man D. REGISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 253
Sequence 10, Application US/07807043B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 5, Application US/08238163
Sequence 5, Application US/08238163
Patent No. 5569830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 662 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: singular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ouery Match
Best Local Similarity 80.0%;
Matches 100; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                Patent No. 5342774
GENERAL INFORMATION:
                                                                                                                                                                                                   STATE: Ne. 10022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     134 GCCTG 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               215 GCTTG 219
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148 GGGCACCTGGGCTTCCCTGGGTTGAGAGCAGGGGTGGAACCGGATTCTGCCTGGCTTGGG 89
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Sequence 97, Application PC/TUS9511934
GENERAL INFORMATION:
APPLICANT: Cytogen Corporation
TITLE OF INVENTION: Antigen Binding Peptides (Abtides) From TITLE OF SEQUENCES: 103
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
                                                                                                                                                                                                                                                                                                                                                                             Length 75;
                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/11934
FILING DATE: 20-SEP-1995
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                         13.5%; Score 22; DB 14; Similarity 9.1%; Pred. No. 1.60e-02; 6; Conservative 19; Mismatches 41.
                            CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/11934
FILING DATE: 20-SEP-1995
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: MISTOCK, S. Leslie
REGISTRATION NUMBER: 18 872
REFERENCE/DOCKET NUMBER: 1101-196-228
TELEPHONE: (212) 869-9090
TELEFAX: (212) 869-9741/8864
TELEFAX: (212) 869-9741/8864
TELEFAX: (212) FORD NO: 99: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: DNA (genomic)
Sequence 75 BP; 1 A; 1 C; 7 G; 5 T; 61 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .T 11
PCT-US95-11934-97 STANDARD; DNA; UNC; 82 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1101-196-228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E: Pennie & Edmonds
1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-9741/8864
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 97:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: Mistock, S. Leslie
REGISTRATION NUMBER: 18,72
REFERENCE/DOCKET NUMBER: 11
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Flore
                                                                                                                                                                                                                                                           LENGTH: 75 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: New York
STATE: New York
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            69 TTGTGG 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88 CTGGGG 83
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            79 HYYTHTNVSGADSKIVTDSYNASGISSSNGGIDGNRSGA-DSYGSSKTAMISRNRIGKIA 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 99, Application PC/TUS9511934.
Sequence 99, Application PC/TUS9511934
GENERAL INFORMATION:
APPLICANT: CAPACION Antigen Binding Peptides (Abtides) From TITLE OF INVENTION: Peptide Libraries
NUMBER OF SEQUENCES: 103
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION: 1..215
OTHER INFORMATION: Standard_name= "Deduced amino acid OTHER INFORMATION: Sequence of PGIP from bean."
Sequence 215 BP; 15 A; 8 C; 25 G; 26 T; 141 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            46; Mismatches 35; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 215;
             NUMBER OF SEQUENCES: 24

CORRESPONDENCE ADDRESS:
ADDRESSE: Townsend and Townsend Khourie and Crew STREET: Steuart Street Tower, One Market Plaza CITY: San Francisco STATE: California
                                                                                                                                           COMPOTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPOTER: IBM PC compatible
OPPRATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
FILING DATE: 03-MAY-1994
CLASSIFICATION: 800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 28; DB 6; L Pred. No. 3.31e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               138 NNAVDSRNMGDASVGSDKNTKKHAKNSADGKVGSK 172
                                                                                                                                                                                                                                                                                        ATTORNEY AGENT INFORMATION:
NAME: Bastian, Revin L.
REGISTRATION NUMBER: 34,774
REFERENCE/DOCKET NUMBER: 2307E-540
TELECOMMUNICATION INFORMATION:
TELEFAX: (415) 543-5603
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 215 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JT 10
PCT-US95-11934-99 STANDARD; DNA; UNC; 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRA.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 17.2%;
Best Local Similarity 13.7%;
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY: unknown
MOLECULE TYPE: protein
                                                                                                                   COUNTRY: US
ZIP: 94105-1493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: New York
STATE: New York
COUNTRY: USA
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MOLECULE TYPE: DNA ORIGINAL SOURCE: Synthetically Prepared IMEDIATE SOURCE: Synthetically Prepared Sequence 105 BP; 15 A; 0 C; 8 G; 1 T; 81 other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY AGENT INFORMATION:
NAME: BTOWN, SCOTT A.
REGISTATION NUMBER: 32,724
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 498-8224
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 448 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                     Query Match 13.5%;
Best Local Similarity 11.6%;
Matches 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
CLASSIFICATION: 514
  TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
                                                                                                                                                                 88 NGSGVADNK 96
                                                                                                                                                                                      67 TTTGGATGG 59
                                                                                                                                                                                                                                                 XXXXXX
01-JAN-1900
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                                                                                                                                                                                                                                                                               Sequence 13, Application US/07865662F.
Sequence 13, Application US/07865662F
Sequence 13, Application US/07865662F
Sequence 13, Application US/07865662F
GENERAL INFORMATION:
APPLICANT: Marcia M. Miller
TITLE OF INVENTION: Restriction Fragment Length
TITLE OF INVENTION: Polymorphism Test For Haplotyping Domesticated Fow
                                                                                                         ö
                                                                                                        0; Gaps
                                                                                                                               Score 22; DB 14; Length 82;
Pred. No. 1.60e-02;
19; Mismatches 41; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 91010-0269
COMPUTER READABLE FORM:
MEDIUM TYPE: 3M Double Density 5 1/4" diskette
COMPUTER: Wang 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NOUSE...

FILING DATE: 07 April, 1992
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/688,326
FILING DATE: 22 April 1991
APPLICATION NUMBER: 07/588,922
FILING DATE: 33 June 1988
APPLICATION NUMBER: 07/210,405
FILING DATE: 3 June 1988
APPLICATION NUMBER: US 07/210,405
FILING DATE: 30 June 1987
APPLICATION NUMBER: US 07/068,176
FILING DATE: 30 June 1987
ATTORREY AGENT INFORMATION:
NAME: Irons, Edward S.
REGISTRATION NUMBER: 16,541
REFERENCE/DOCKEY NUMBER: 16,541
RECIENTATION NUMBER: 16,541
RECIENTATION NUMBER: 16,541
RECIENTATION SEQ 10 N: 13:
TELEPHONE: (202) 783-6040
TELEPHONE: (202) 783-6040
TELEPRAX: (202) 783-6011
TELEPHONE: CASSO 1D NO: 13:
LENGTH: 82 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
Sequence 82 BP; 1 A; 2 C; 10 G; 8 T; 61 other;
                                                                                                                                                                                                                                      T 12
US-07-865-662F-13 STANDARD; DNA; UNC; 105 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OPERATING SYSTEM: MS DOS Version 3.20 SOFTWARE: Microsoft CURRENT APPLICATION DATA: APPLICATION NUMBER: US/07/865,662F FILING DATE: 07 Appil, 1992 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: United States of America ZIP: 91010-0269
                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: City of Hope
STREET: 1500 East Duarte Road
                                                                                 Query Match
Best Local Similarity 9.1%;
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nucleic Acid
                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Duarte
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: Nucleic STRANDEDNESS:
                                                                                                                                                                           76 TTGTGG 81
                                                                                                                                                                                                  88 CTGGGG 83
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                                                                                                                                            28 KNSGKNKSANAVNNGNNAKNSNNNKSNNMGTRDNKNNRNAAKNNNSGVADNKNNASNNYD 87
                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 7, Application US/08702080.

APPLICANT: Jacobs, Kenneth APPLICANT: Lavallie, Edward APPLICANT: Racie, Lisa APPLICANT: Merberg, David APPLICANT: Spanling, Vikki APPLICANT: Spanling, Vikki TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES TITLE OF INVENTION: ENCODING THEM NUMBER OF SEQUENCES: 11

CORRESPONDENCE ADDRESS:
                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
Score 22; DB 5; Length 105;
Pred. No. 1.60e-02;
24; Mismatches 37; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: cDNA
Sequence 448 BP; 121 A; 103 C; 120 G; 78 T; 26 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/702,080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 13.5%; Score 22; DB 7; Len Best Local Similarity 27.8%; Pred. No. 1.60e-02; Matches 10; Conservative 19; Mismatches 7;
                                                                                                                                                                                                                                                                                                                                                                                 US-08-702-080-7 STANDARD; DNA; UNC; 448 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: Genetics Institute, Inc. STREET: 87 CambridgePark Drive CITY: Cambridge STATE: Massachusetts COUNTRY: U.S.A. 21P: 02140
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Search completed: Tue Apr 7 22:01:47 1998 Job time: 18 secs.
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    \begin{array}{c} \mathbf{M} \\ \mathbf{O} \\ \mathbf{
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLONE: pTZgpt-F1s
Sequence 7218 BP; 1944 A; 1491 C; 1486 G; 1929 T; 368 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 21; DB 7; Length 7218; Pred. No. 6.11e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       47; Mismatches 26; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PACENTIN Release #1.0, Version #1.25 CURREMY APPLICATION DATA: APPLICATION NUMBER: US/08/232,463 FILING DATE:
                                                                                                                                                                                                                                                                                                             Ol-Jan-1900
Sequence 14, Application US/08232463.
Sequence 14, Application US/08232463.
Sequence 14, Application US/08232463.
Sequence 14, Application US/08232463.
GENERAL INFORMATION:
APPLICANT: DORNER, F. APPLICANT: SCHEIFLINDER, F. APPLICANT: FALKNER, F. G. TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS NUMBER OF SEQUENCES: 52
:||: :::| |:::|:::| |:::||:|| |::||:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:|| |:
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US-08-232-463-14 STANDARD; DNA; UNC; 7218 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: Foley & Lardner
STREET: 1800 Diagonal Road, Suite 500
CITY: Alexandria
STATE: VA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EP 91 114 300.6
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/935,313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
APPLICATION NUMBER: EP 91 114
FILING DATE: 26-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: BENT, Stephen A.
REGISTRATION NUMBER: 29,768
REFERENCE/POCKET/NUMBER: 30472
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703)836-9300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 22313-0299
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (703)683-4109
TELEX: 899149
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 7218 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: nucleic acid
STRANDEDNESS: single
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LT 15 US-08-471-052A-142 STANDARD; DNA; UNC; 69 BP.

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RESULT

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                                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: DNA
Sequence 69 BP; 2 A; 4 C; 6 G; 2 T; 55 other;
                                                                                                                                                                                                                                                                                                                                      ACTION NUMBER: US/08/471,052A
FILING DATE: 06-JUNE-1995
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Misrock, S. Leslie
REGISTARTION NUMBER: 18,872
REFERENCE/DOCKET NUMBER: 1101-179
TELEPHONE: 212 790-9090
TELEFAX: 212 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 142:
SEQUENCE CHARACTERISTICS:
LENGTH: 69 bases
                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: unknown
                                                                                                                                                                                                                                                                         COMPUTER: IBM PC OPERATING SYSTEM:
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15 350 6.2 943 25 136927 Sequence 12 from paten 3.71e-246 207 3.6 1866 25 132295 Sequence 1 from paten 3.77e-131 17 199 3.5 920 25 136937 Sequence 22 from paten 3.77e-131 18 149 2.6 225 25 136933 Sequence 18 from paten 1.14e-85 20 136 2.4 2099 25 136949 Sequence 25 from paten 1.18e-75 20 136 2.4 2099 25 136949 Sequence 24 from paten 1.18e-75 21 137 2.4 209 14 MMU19031 Mus musculus Smage-1 p 2.02e-76 Mus musculus Smage-1 p 2.02e-76 22 137 2.4 2809 14 MMU19031 Mus musculus Smage-1 p 2.02e-76 22 137 2.2 288886 26 5 138925 Sequence 10 from paten 1.87e-75 22 127 87 1.5 687 25 13298 Sequence 10 from paten 1.87e-75 22 127 87 1.5 687 25 132296 Sequence 2 from paten 1.87e-75 22 127 87 1.5 687 25 132296 Sequence 2 from paten 1.87e-75 29 62 1.0 3899 14 MUSNECDIN Musculus smage-1 p 2.02e-19 30 59 1.0 3899 14 MUSNECDIN Musculus necdin mRNA 2.86e-19 30 59 1.0 3899 14 MUSNECDIN Musculus necdin mRNA 2.86e-19 47 62 132296 Sequence 2 from patent 2.86e-19 24 10 3899 14 MUSNECDIN Musculus necdin mRNA 2.86e-19 47 62 132296 Sequence 2 from patent 2.86e-19 47 62 132296 Sequence 5 from patent 2.86e-19 47 62 132296 Sequence 5 from patent 2.86e-19 47 62 132296 Sequence 5 from patent 2.86e-19 44 0.7 826221 EACO2000 Sequence 5 from patent 2.96e-15 128278 Sequence 5 from patent 2.96e-15 128278 Sequence 5 from patent 2.96e-15 128278 Sequence 5 from patent 2.96e-16 129 128278 Sequence 5 from patent 2.96e-17 127 127 127 127 127 127 127 127 127 1	ALIGNMENTS SEGULT 124013 5674 bp DNA SEQUENCESSION 14013 5674 bp DNA SEQUENCESSION 14013 5674 bp SEQUENCESSION 14013 5674 bp SEQUENCESSION 14013 5674 carin-chesa,P., Rettig,W. Bruggen,P., Boon-Falleur,T. and Old,L.J. TITLE Noncolonal antibodies which bind to tumor rejection antipogeneral monoclonal antibodies which bind to tumor rejection antipogenes ANTHORS 1001RED 10
	Numatch STD : Dbass 0; Query 0 Searched: 354530 seqs, 59121332 bases x 2 Post-processing: Minimum Match 0% Listing first 45 summaries Database: embl53 Insmin 1 2:em_lor 3:em_cor 3:em_cor 5:em_pl 6:em_htg 7:em_hunil 8:em_huni 9:em_ba 10:em_ro 11:em_un 12:em_vi 13:em_hunil 8:em_huni 9:em_ba 10:em_ro 11:em_un 12:em_vi 13:em_hunil 8:em_huni 9:em_ba 10:em_ro 11:em_un 12:em_vi 14:qb_ro 15:qb_om 16:qb_ov 17:qb_in 18:qb_pi 19;qb_ba 20:qb_st 21:qb_vi 22:qb_pk 23:qb_sy 24:qb_un 25:qb_pat 20:qb_st 21:qb_vi 22:qb_pk 23:qb_sy 24:qb_un 25:qb_nat 20:qb_st 21:qb_vi 22:qb_pk 23:qb_sy 24:qb_un 25:qb_nat 20:qb_st 21:qb_vi 22:qb_pk 23:qb_sk 24:qb_un 25:qb_nat 20:qb_st 21:qb_vi 21:qb_sk 23:qb_sk 24:qb_un 25:qb_nat 20:qb_st 21:qb_sk 23:qb_sk 24:qb_un 25:qb_nat 20:qb_st 21:qb_sk 23:qb_sk 24:qb_un 25:qb_nat 20:qb_st 21:qb_sk 23:qb_sk 24:qb_nat 20:qb_sk 23:qb_sk 24:qb_nat 20:qb_sk 24:qb_sk 24:qb_nat 20

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; 음	241	CCCAGCTCTGTAAGGAGGCAAGGTGACATGCTGAGGAGGACTGAGGACCCACTTACCCC 30	
οy	241		
g 2	301	AGATAGAGGACCCCAAATAATCCCTTCATGCCAGTCCTGGACCATCTGGTGGTGGACTTC 360	
7 원	361	TOAGGTGGGCCACCCCAGCCCCTTGCTGTTAAACCACTGGGGACTCGAAGTCAGAG	
δ	361	TCAGGCTGGGCCACCCCCTGCTTGCTGCTTAAACCACTGGGGACTCGAAGTCAGAG 420	
QQ	421	CTCCGFQTGATCAGGGAAGGGCTGCTTAGGAGGGGAGCGTCCAGGCTCTGCCAGACAT	
δ	421		
g &	481	CATGCTCAGGATTCTCAAGGGGGGGGGTGGGGTCCCTAAGACCCCACCTCCGTGACCCAAC 540	
g	541		
δy	541	CCCCACTCCAATGCTCACTCCCGTGACCCCACTCTCATTGTCATTCCAACCCCCA 600	
qq	601	CCCCACATCCCCCACCCCATCCCTCAACCCTGATGCCCATCCCAGCCATTCCACCCT 660	
ΟŊ	601		
qa .	661	CACCCCACCCCCACGCCCACGCCCACCCCACCCCACGCAGGCAGGCAGGCATCCCGGTTCCCGGCACGCAC	
δλ	199	CACCCCCACCCCCACCCCCACTCCCACCCCCAGGCAGGCA	
g &	721	CCAGGAAACATCCGGGTGCCCGGATGTGACGCCACTGACGTTGTGGGGCAGAGA 780 	
qq	781	GAAGCGAGGTTTCCATTCTGAGGGACGGCGTAGAGTTCGGCCGAAGGAACCTGACCCAGG 840	
οy	781		
q	841	CICIGIGAGGAGGCAAGGIGAGGAGGGGGGGAGGACTGAGGACCCCGCCACICCAAAIA 900	
ογ	841	-5	
oy Oy	901	GAGAGCCCCAAATATTCCAGCCCGCCCTTGCTGCCAGCCTGGCCCACCCGGGAAGA 960	
셤	961		
δÿ	961	COTCTCAGCCTGGGCTGCCCCCAGACCCTGAAAGCCTTGAGAGACACCAGGTTC 1020	
g :	1021	TTCTCCCCAAGCTCTGGAATCAGAGGTTGCTGTCACCAGGGCAGGACTGGTTAGGAGAGG	
S &	1001		
S &	1081	GCAGGGCACAGGCTCTGCCAGGCATCAAGGCACCCAAGAGGGGGGGG	
පි	1141		
ΟŊ	1141	CCAAGACTGCAATCCCCACTCCACCCCATTCGCATTCCCATTCCCATCCCAACC 1200	
g :	1201	CCCATCTCCTCAGCTACACCTCCACCCCCATCCCTACTCCGTACTCCGTCACCTGACCACC 1260	
영·	1261	ACCOTCAGCCCAGCCCCAACCCTTGCCACTCACCCTCACCCCCCACCCTACCCCCCAACCCTACCTCACCCCCAACCCTACCTACCTCACCCCCAACCCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACCTACACTACT	

ò	1261	ACCTCCAGCCCCAGCACCAGCCCTTCTGCCACCTCACCCTCACTGCCCCAAC 1320
QQ	1321	CCACCCTCATCTCTCTCATGTGCCCCACTCCCATCGCCTCCCCATTCTGGCAGAATO
QY	1321	CCCACCCTCATGTGTGCCCCACTCCCATCCCCTCTCGGCATCC 1380
q	1381	TTTGCCCCTGCTCTCAACCCAGGGAAGCCCTGGTAGGCCCGATGTGAAACCACTGAC
Qy	1381	GTTGCCCCTGCTCTCAACCCAGGGAAGCCCTGGTAGGCCCGATGTGAAAC
a a	1441	TGAACCTCACAGATCTGAGAAGCCAGGTTCATTTAATGGTTCTGAGGGCGCGCTTGAG 1500
5 6	* <	
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g	1561	AGGAGGCACACCCCCAGGTAGGCCCCCAAAATGATCCAGTACCACCTGCT
δy	1561	JAGGAGGCACACACCCCAGGTAGATGGCCCCCAAAATGATC
q	1621	CCAGCCCTGGACCACCCGGCCAGGACAGATGTCTCAGCTGGACCACCCCCCGTCCCGTCC 1680
ΟŊ	1621	CAGCCCTGGACCACCGGCCAGGACAGATGTCTCAGCTGGACCACCCCCCGTCCCGTC
qq	α	74
ογ	1681	SCCACTTAACCCACAGGGCAATCTGTAGTCATAGCTTATGTGACCGGGGCAGGGT
d G	₹*	80
οy	1741	GTCAGGAGAGGCCCCAGGCATCAAGGTCCAGCATCCGCCCGGCATTAGGGTCAG
QQ	1801	SAGGGTTCCCACCCACACCTGTCTCTCATCTCCACGCCACC 186
Oy	1801	CTGGGAGGGAACTGAGGTTCCCCACCCACACTGTCTCCTCATCTCCACGCCAC
g	1861	ACCIACCCCIACCCCAACCICATCIIGICAGAAICCCIGCIG 19
οy	1861	SACATICCCATACCTACCCCTACCCCCAACCTCATGTCAGAATCCCTGCT
Q	1921	TCAACCCACGGAAGCCACGGGAATGCCGGCCAGGCACTCGGATCTTGACGTCCCCATCCA 1980
ΟŸ	1921	CAACCCACGGAAGCCACGGGAATGGCGGCCAGGCACTTGGACGTCCCCATCC
q	1981	GGGTCTGATGGAGGGAGGGGCTTGAACAGGGCCTCAGGGGAGCAGGGGGCCCTAC 2040
δλ	1981	GGTCTGATGGAGGGAAGGGGCTTGAACAGGGCCTCAGGGGAGCAGCAGGGGGCCCTA
q	2041	
δλ	2041	acGagargaggaggccrcagaggacccaggacccraggacaccgcacccrgga
තු .	10	16
δŏ	2	TGAGGCTGCCACTTCTGGCCTCAAGAATCAGAACGATGGGGACTCAGATTGCATGGGG 215
g	9	22
ò	2161	3GGACCCAGGCCTGCAAGGCTTACGCGGAGGAAGAGGAGGAGGAGGACTCAGGGGACCTT 222
qa	2221	GGAATCCAGATCAGTGTGGACCTCGGCCCTCAGAGGTCCAGGCCACGGTGGCCACATATG 2280
δλ	2221	GAATCCAGATCAGTGTGGACCTCGGCCCTGAGAGGTCCAGGGCACGGTGGCCACATAT
q	2281	GCCCATATTTCCTGCATCTTTGAGGTGACAGGACAGTGTGTGT
οy	2281	cccataiticcigcaicitigaggigacagaacagacigigicigagaagigggg
С	34	40
δ	2341	caggtcaacagaggaggagttccaggatccatatggcccaagatgtgccccttcat

 \sim

qa vo	2401 A	AGGACTGGGGATATCCCCGGCTCAGAAAGAAGGGACTCCACACAGTCTGGCTGTCCCCTT 2460	
g &	2461 T 2461 T	TTAGTAGCTCTAGGGGGACCAGATCAGGGATGGCGGTATGTTCCATTCTCACTTGTACCA 2520	
g &	2521 C 	CAGGCAGGAAGTIGGGGGCCCTCAGGGAATGGGGTCIIGGGGTAAAGGGGGGAIGICI 2580 	
අ <i>ද</i>	2581 A 2581 A	ACTCATGTCAGGGAATTGGGGGGTTGAGGAAGCACGGGCGTGGCAGGAATAAAGATGAGT 2640	
g &	2641 G 2641 G	GAGACAGACAAGCTATTGGAATCCACCCCAGAACCAAAGGGGTCAGCCCTGGACACC 2700 	
සි දි	2701 T	CACCCAGGATGIGGCTICTITICACICCIGITICCAGATCIGGGGCAGGTGAGGACCT 2760	
දු දු	2761 C 2761 C	CATICICAGAGGGTGACTCAGGTCAACGTAGGGACCCCCATCTGGTCTAAAGACAGAGCG 2820 	
දු වූ	2821 GT(2821 GT(TCCCAGGATCTGCCATGCGTTCGGGTGAGGAACATGAGGGGGGGCTGAGGGTACCCCAG 2880 	
원 상	2881 G 2881 G	GACCAGAACACTGAGGGGGAGACTGCACAGAATCAGCCCTGCCCCTGCTGTCACCCCAGAG 2940 	
da ç	2941 A 2941 A	AGCATGGGCTGGGCGGTCTGCCGAGGTCCTTCCGTTATCCTGGGATCATTGATGTCAGGG 3000	
op oy	3001 A	ACGGGGAGGCCTTGGTCTGAGAAGGCTGCGCTCAGGTCAGTAGAGGGAGCGTCCCAGGCC 3060 	
තු දුර	3061 C	CTGCCAGGAGTCAAGGTGAGGACCAAGCGGGCACCTCACCCAGGACACATTAATTCCAAT 3120 	
g &	3121 G 3121 G	GAATTTTGATATCTCTTGCTGCCCTTCCCCAAGGACCTAGGCACGTGTGGCCAGATGTTT 3180	
do y	3181 G	GTCCCTCCTGTCCTTCCATTCCTTATCATGGAACTCTTGATTTGGATTTCTCAG 3240	
d y	3241 A	ACCAGCAAAAGGGCAGGATCCAGGCCCTGCCAGGAAAAATATAAGGGCCCTGCGTGAGAA 3300 	
දි යි	3301 C	CAGAGGGGTCATCCACTGCATGAGAGTGGGGATGTCACAGAGTCCAGCCCACCCTCGTG 3360 	
දි සි	3361 G 3361 G	GIAGCACTGAGAAGCCAGGGCTGTGCGGTCTGCACCCTGAGGGCCCGTGGATTCCT 3420	
Oy Oy	3421 C	CTTCCTGGAGCTCCAGGAACCAGGCAGTGAGGCCTTGGTCTGAGACAGTATCCTCAGGTC 3480 	

CCTTCAGGTTTTCAGGGGACAGGCCAACCCAGAGGACAGGATTCCCTGGAGGCCACAGAG GAGCACCAAGGAGAAGATCTGTAAGTAGGCCTTTGTTAGAGTCTCCAAGGTTCAGTTCTC CACTGCTGGGTCAACAGATCCTCCCCAGAGTCCTCAGGGAGCCTCCGCCTTTCCCACTAC TCAGTCCTGTAGAATCGACCTCTGCTGGCCGGCTGTACCCTGAGTACCCTCTCACTTCCT CATCAACTTCACTCGACAGAGGCAACCCAGTGAGGGTTCCAGCAGCAGCGTGAAGAGGAGGG AATGCTGGAGAGTGTCATCAAAAATTACAAGCACTGTTTTCCTGAGATCTTCGGCAAAGC CTCCTATGTCCTTGTCACCTGCCTAGGTCTCTCTCTATGATGGCCTGCTGGGTGATAATCA CCATGCTCCTGAGGAGGAAATCTGGGAGGAGCTGAGTGTGATGGAGGTGTATGATGGGAG GGAGCACAGTGCCTATGGGGGAGCCCAGGAAGCTGCTCACCCAAGATTTGGTGCAGGAAAA GCCAAGCACCTCTTGTATCCTGGAGTCCTTGTTCCGAGCAGTAATCACTAAGAAGGTGGC

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PAT
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Mismatches 0;
                                                                                                                                                                                           0; Mismatches
                                                                                                                   tumor rejection antigen precursor
itent: US 5612201-A 8 18-MAR-1997;
Location/Qualifiers
                                    5612201
                                                                                                                                               /organism="unknown"
1644 c 1569 g
                         DNA
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                                                                                                                                                                             Score
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qq	4021	CACTGCTGGGGTCAACAGATCCTCCCCAGAGTCCTCAGGGAGCCTCCGCCTTTCCCACTAC 4080
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δŏ	4081	CAACTICACTCGACAGAGGCAACCCAGIGAGGGTICCAGCAGCCGTGAAGAGGAGGG 4
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QY	4141	CCAAGCACCTCTTGTATCCTGGAGTCCTTGTTCCGAGCAGTAATCACTAAGAAGGTGG
qa	4201	GATITGGTTGTTTCTGCTCCTCAAATATCGAGGCCAGGGAGCCAGTCACAAAGGC
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Qy	4261	SCIGGAGAGTGTCATCAAAAATTACAAGCACTGTTTTTCCTGAGATCTTCGGCAAAGC 43
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qa	4441	GATCATGCCCAAGACAGGCTTCCTGATAATTGTCCTGGTCATGATTGCAATGGAGGCGG 4500
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Qy	4501	CATGCTCCTGAGGAGGAAATCTGGGAGGAGCTGAGGTGTGATGGAGGTGTATGATGGAGG 4
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OY	4561	GAGCACAGIGCCTATGGGGAGCCCAGGAAGCTGCTCACCCAAGATTGGTGCAGGAAAA 46
qa	4621	GTACCTGGAGTACGGCAGGTGCCGGACAGTGATCCCGCACGCTATGAGTTCCTGTGGGGT 4680
Qy	4621	IACCIGGAGTACGGCAGGTGCCGGACAGTGATCCCGCACGCTATGAGTTCCTGTGGGG
qq	4681	CCAAGGCCCTCGCTGAAACCAGCTATGTGAAAGTCCTTGAGTATGTGATCAAGGTCAGT 4740
Qy	4681	3GGCCCTCGCTGAAACCAGCTATGTGAAAGTCCTTGAGTATGTGATCAAGGTCAGT 4
qq	4741	CAAGAGTTCGCTTTTCTTCCCATCCCTGCGTGAAGCAGC
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Qy	4801	GAGTCTGAGCATGAGTTGCAGCCAAGGCCAGTGGGAGGGGGACTGGGCCAGTGCACTT 486
qq	4861	CAGGGCCGCGTCCAGC
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B., Szikora, J., De Smet, C. and il in determining expression of 51; AATCTGCCGGACCCAAGGTGTG 1096 AGATAAGGTGTTGGTGTAAAG 1276 AGAGTGGTGGAGTGTCAATGC 2340 GGGATCCTGGGCACAGTGGCC 976 GAGTTGAGGGCTGTGGTCTGA 1036 GRAAGGGATGCCACAGAGTCTG 1156 GGATGGCCCTAAGTGACAATCT 1216 GATGTCCTCTAAAGATGTAGG 5535 CCTTCTGGGGGAGCTGATTGT 2400 CCCTAGAACCAAAGGGGTCAG 1396 622; Indels 85; Gaps 21-APR-1997 25; Length 4157; 00; PAT

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and 1 (bases 1 to 2305)
De Plaen, E., Boon-Falleur, T., Lethe, B., Szikora, J., De Smet, C.
Chomez, P. 4849 5143 2025 5263 2142 5383 2202 2261 5502 5562 2376 5622 1738 4963 5083 1917 2084 5323 1797 5023 1857 TTGTGAATTTGGGACATAATAACAGCAGTGGA-GTA---AGTATT-T-AGAAGTGTGAAT 1971 21-APR-1997 4908 CATTCTTCACTCTG----AAGAGAGGGGTCAGTGTTCTCAGTAGTAGGTTTCTGTTCTAT GTAAGCCAGACACACCTACCGATAGGGTATTAAGAGTCTAGGAGC-GCGGTCATATAA AGGAGGAAGAGGGAGTCTGAGCATGAGTTGCAGCCAGGGCTGTGGGGGAAGGGGCAGGGCT TGGATGGTTGAATTAACTTCAGCATCCAAGTTTATGAATCGTAGTTAACGTATATTGCTG TCTCTATGCACTGAGCATCTGCTCTGTGGAAGGCCCAGGATTAGTAGTGGAGATACTAGG CATTCTTCACTCTGTTTGAAGAAATAGTCAGTGTTCTTAGTAGTGGGTTTCTATTTTGT TGGATGACTTGGAGATTTATCTCTGTTTCCTTTTACAATTGTTGAAATGTTCCTTTT-AA 5674 GAAACTCCATTTTCTTCTGAGGGATCTGATTCTAATGAAGCTTGGTGGGTCC 2428 PAT 2305 bp DNA Sequence 17 from patent US 5612201. 136932 g2084892 Unknown. Unclassified . Unknown. ^ DEFINITION ACCESSION ORGANISM REFERENCE AUTHORS 1798 1858 5204 5264 5384 5444 2262 2318 5563 2377 5623 1679 1739 5084 1918 1972 2026 2085 2143 2203 5503 KEYWORDS SOURCE RESULT LOCUS ΩŽ 원 òγ g ογ g ò g δý g QΥ 셤 Ω g ò g ολ g ò ద δý ద òγ g ò 셤 ò g ò

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Isolated nucleic acid molecules useful in determining expression a tumor rejection antigen precursor
Patent: US 5612201-A 16 18-MAR-1997;
Location/Qualifiers
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De Plaen,E., Boon-Falleur,T., Lethe ,B., Szikora,J., De
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1	nor rejection antigen precursor nt: US 5612201-A 11 18-MAR-1997; Location/Qualifiers 1. 1640 /organism="unknown" 380 a 402 c 457 g 401 t 14.3%; Score 811; DB 25; Length 16. llarity 81.7%; Pred. No. 0.00e+00;	Conservative 0; Mismatches 248; Indels 33; Agragedroccaracteces 248; Agragedroccaracteces	dy 3936 AACAAGAGGCCTGGTGTGTGTGTGTGTGTGTGTGTGTGTG	467 TGGCCTGGAGTTCCAAGCACCACTAGTAGGAGGAGGTGGCCGAGTTGGTTCATT	

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                                                                                                                     Score 683; DB 25; Length 1068;
Pred. No. 0.00e+00;
0; Mismatches 153; Indels 11;
                                    determining
                          Chomez, P. Isolated nucleic acid molecules useful in
       1 (bases 1 to 1068)
De Plaen,E., Boon-Falleur,T., Lethe ,B.,
                                             a tumor rejection antigen precursor
Patent: US 5612201-A 15 18-MAR-1997
Location/Qualifiers
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Pred. No. 2.39e-280;
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Release 2.1D John F. Collins, Biocomputing Research Unit. Copyright (c) 1993, 1994, 1995 University of Edinburgh, U.K. Distribution rights by IntelliGenetics, Inc.

- n.a. database search, using Smith-Waterman algorithm n.a. MPsrch_nn Tue Apr 7 20:42:40 1998; MasPar time 486.01 Seconds 1340.532 Million cell updates/sec Run on:

not generated Tabular output

(1-5674) from 5541104.seq 5674 >US-08-190-411A-1 Title:

1 CCCGGGGCACCACTGGCATC.......TAATGATCTTGGGTGGATCC 5674 GGGCCCCGTGGTGACGTAG.....ATTACTAGAACCCACCTAGG Description: Perfect Score: N.A. Sequence:

TABLE default Gap 6 Scoring table:

Dbase 0; Query 0 STD Nmatch

Searched:

159649 seqs, 57412152 bases x 2

Minimum Match 0% Listing first 45 Post-processing:

summaries

Database:

1:n-geneseq1 n-geneseq30

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Mean 10.653; Variance 6.314; scale 1.687

Statistics:

STIMMARTES

		dР			SUMMAKIES		
Result No.	Score	Query	Length	DB	ΙD	Description	Pred. No.
-	5674	100.0	5674	н	072477	Tumour rejection antig	0.00e+00
7	5672	100.0	5674	Н	032352	MAGE-1 nucleic acid.	0.00e+00
m	5650	9.66		۲	098902	Tumour rejection antig	0.00e+00
4	2419	42.6	2419	Н	Q72476	Tumour rejection antig	0.00e+00
Ŋ	2419	42.6	2419	Н	032351	Antigen E gene.	0.00e+00
9	2415	42.6	2419	٦	T05086	MZ2-MEL antigen E prec	0.00e+00
7	2413	42.5	2420	٦	072472	Tumour rejection antiq	0.00e+00
∞	2413	42.5	2420	٦	085435	Human melanoma antigen	0.00e+00
σ	1483	26.1	4157	-	072478	Tumour rejection antig	0.00e+00
10	1481	26.1	4157	Н	032353	MAGE-2 gene.	0.00e+00
11	1399	24.7	2531	П	072483	tion	0.00e+00
12	1399	24.7	2531	-	072482	Tumour rejection antig	0.00e+00
13	1397	24.6		٦	032357	MAGE-4 gene.	0.00e+00
14	1395	24.6		٦	032358	MAGE-41 gene.	0.00e+00
15	1225	21.6		Н	072486	Tumour rejection antig	0.00e+00
16	1225	21.6	2305	-	T01165	MAGE-51 gene.	0.00e+00
17	1225	21.6	2305	-	032361	MAGE-51 genomic DNA.	0.00e+00
18	943	16.6	2226	←	032360	MAGE-5 cDNA.	0.00e+00
19	943	16.6	2226	~	072485	Tumour rejection antig	0.00e+00
20	832	14.7	1084	 1	067866	H6/MAGE-1 expression c	0.00e+00

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H6/MAGE-1 expression c	Tumour rejection antig	MAGE-3 cDNA.	Tumour rejection antig	MAGE-4 cDNA.	Tumour rejection antig	MAGE-9 gene.	MAGE-9 genomic DNA.	MAGE-7 gene.	MAGE-7 genomic DNA.	Tumour rejection antig	MAGE-8 gene.	Tumour rejection antig	MAGE-8 genomic DNA.	MAGE-11 gene.	Tumour rejection antig	MAGE-11 genomic DNA.	Tumour rejection antig	MAGE-31 gene.	Human MAGE-3 DNA.	Baboon MAGE-3 homologu	Baboon MAGE-3 homologu	DNA encoding MAGE-Xpi	Tumour rejection antig	MAGE-10 genomic DNA.
067865	072480	032355	072484	032359	072490	T01169	032365	T01167	032363	072488	T01168	072489	032364	T01171	072492	032367	072481	032356	T63345	T63349	T63346	T41492	072491	032366
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832	811	795	683	681	645	645	641	611	611	611	295	295	562	392	392	392	350	350	264	255	248	207	199	199
21	22	23		22	56	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

PF 17-WAR-1994; U02877.

PR 26-WAR-1993; US-037230.

PR 26-WAR-1994; US-037230.

PR 26-WAR-1994; US-037230.

PR 26-WAR-1994; US-037230.

PR 26-WAR-1994; US-037230.

PR WPI; 94-333192/41.

PR WPI; 94-333192/41.

PR FIREALMENT and diagnosis of cancer.

PR Sample 26; Page 59; 105pp; English.

C 072477 is the DNA sequence which encodes melanoma antigen-1

CC (MAGE-1). Another melanoma antigen precursor. Melanomas.

CC (MAGE-1). Another melanoma antigen precursor. Melanomas.

CC (MAGE-1). Another melanoma antigen precursor. Melanomas.

CC (MAGE-1). Another melanoma antigen by the administration controred, by contacting a test sample with an agent that can recognise MAGE-3. The melanoma can be treated by the administration of cytolytic T cells specific for the complex of antigen D (the metugen (esp. HLA-A1).

Sequence 5674 BP; 1276 A; 1644 C; 1569 G; 1185 T; 22-JUN-1995 (first entry)
Tumour rejection antigen MAGE-1 encoding DNA.
Tumour rejection antigen; melanoma antigen-1; MAGE-1; MAGE-3; cancer; cytolytic T cells; antigen D; human leucocyte antigen; Location/Qualifiers 3881. .4711 Q72477 standard; DNA; 5674 BP Q72477; Homo sapiens /*tag= a WO9423031-A. 13-OCT-1994

Gaps ö Query Match 100.0%; Score 5674; DB 1; Length 5674; Best Local Similarity 100.0%; Pred. No. 0.00e+00; Matches 5674; Conservative 0; Mismatches 0; Indels 0;

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1. CCCGGGGCACCACTGGCATCCCTCCCCTACCACCCCCAATCCCTTCTTACGCCACCC 60

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qq	1441	AACCTCACAGAICTGAGAGAGCCAGGTTCATTAATGGTTCTGAGGGGGGGGG
QY	1441	
q	1501	GTGAGATGCTGAGGGAGG 156
٥y	1501	cacidadegeaereeritiraeecicigteaegaeecaagereagarecteaega
qa a	1561	ACTGAGGAGGACACACCCCAGGTAGATGGCCCCAAAATGATCCAGTACCACCCCTGCTG 1620
g qa	62	3CCTGGACCACCCGGCCAGGACAGATGTCTCAGCTGGACCACCCCCCGTCCCGTCC 168
δŏ	1621	
qq	1681	TTGCCACTTAACCCACAGGCAATCTGTAGTCATAGCTTATGTGACCGGGCAGGGT
Qy	1681	
đ	1741	GGTCAGGAGAGCCAGGCCCAGCATCAAGGTCCACATCCGCCGGCATTAGGGTCAGG 1800
οy	1741	TCAGGAGAGGCAGGGCCAGGCATCAAGGTCCAGCATCGGCCGGC
qa	1801	ACCTGGGAGGAACTGAGGGTTCCCCACACACTGTCTCCTCATCTCCACCGCCACC 1860
Qy	1801	corgodadadadadadatrococacacacacacacacacacacacacacacacaca
qq	1861	CCACTCACATTCCCATACCTACCCCCTACCCCCAACTCATGTGAGAATCCCTGCTG 1920
Qy	1861	CACTCACATTCCCATACCTACCCCTACCCCCAACCTCATCTTGTCAGAATCCCTGCT
q	1921	TCAACCCACGGAAGCCACGGAATGGCGGCCAGGCACTCGGATCTTGACGTCCCCATCCA 1980
Qy	1921	CAACCCACGGAAGCCACGGGAATGGCGGCCAGGCACTCGGATCTTGACGTCCCCATC
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δλ	1981	GGTCTGATGGAGGGAAGGGGCTTGAACAGGGCCTCAGGGGAGCAGAGGGAGG
đ	2041	TGCGAGATGAGGGAGGCTCAGAGGACCCAGCACCCTAGGACACCGCACCCTGTCTGAG 2100
Qy	2041	gceagargaegaegecrcagaegacccagcacccrageacaccccaccc
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ΟŸ	2101	SAGCTGCCACTTCTGGCCTCAAGAATCAGAACGATGGGGACTCAGATTGCATGGG
QQ	2161	GTGGGACCCAGGCCTGCAAGCCTTACGCGGAGGAAGAAGGGGAGGAGGACTCAGGGGACCTT 2220
Qy	2161	TGGGACCCAGGCCTGCAAGGCTTACGCGGAGGAGGAGGAGGAGGACTCAGGGGACTT 2
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09-JUL-1991; US-728838.
23-SEP-1991; US-764334.
12-DEC-1991; US-807043.
(LUDW-) LUDWIG INST CANCER RES.
BOON I, CHOMEZ P, De Plaen E, Li
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Best Local Similarity 100.0%;
Matches 5673; Conservative
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PT Nucleic acid mol. encoding a human tumour rejection antigen

PT rearing and preventing cancers, also useful in diagnosis

PT treating and preventing cancers, also useful in diagnosis

PS Disclosure; Page 71-73; 142pp; English.

CC The sequences given in 03232-69 represent a new family of genes

CC refered to as melanoma antigens (MAGE). The CDNAs of this gene
family were identified during the isolation of the antigen E gene.

CC The MAGE CDNAs, when tested, did not transfer expression of antigen

CC The MAGE CDNAs, when tested, did not transfer expression of antigen

CC The MAGE CDNAs share a certain degree of homology with each

CC other and are expressed in tumour cells including several types of

CC thuman tumor cells as well as in human tumors. MAGE expression is not

restricted to melanomas. MAGE refers to a family of tumor rejection

antigen precursors. The antigens resulting from these genes are

CC referred to as MAGE TRAS or melanoma antigen tumor rejection antigens.

See also 032351.

Squence 5674 BP; 1277 A: 1427.
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tumor rejection antigen precursor; MAGE; antigen E; gene family; ss.
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Tumour rejection antigen (MAGE-1) gene.
Tumour rejection antigen; MAGE-1; monoc
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Best Local Similarity 100.0%;
Matches 5650; Conservative
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(SLOK) SLOAN KETTERING INST CANCER RES.

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BOOn-falleur T, Chen Y, Garin-chesa P, Old LJ, Rettig WJ;

Stockert E, Van der bruggen P;

Stockert E, Van der bruggen P;

New monoclonal antibody binding specifically to MAGE-1 - useful for diagnosis and monitoring of cancer, also new hybridomas, recombinant MAGE-1 and immunogenic peptide(s)

MAGE-1 and immunogenic peptide(s)

MAGE-1 and immunogenic peptide(s)

Stockert E, Page 16-19, 37pp; English.

MAGE-1 on be used to detect MAGE-1 in samples by standard immunosasay methods for diagnosis and monitoring of cancer etc. The monoclonal antibody is designated MA454 and is produced by the hybridoma deposited as ATCC HBBL1540. The monoclonal antibody is specific for MAGE-1, having no reactivity for MAGE-2 or MAGE-3.

Peptide fragments of MAGE-1 (See R80618-20) may be useful as immunogens for production of the monoclonal antibody and antisera.

Sequence 5724 BP; 1282 A; 1653 C; 1589 G; 1200 T; 180 240 540 120 120 180 240 300 300 360 420 420 480 9 9 Gaps CATGCTCAGGATCTCAAGGAGGCTGAGGGTCCCTAAGACCCCACTCCCGTGACCCAAC CCGGGGGCACCACTGGCATCCCTCCCCTACCACCCCCAATCCCTCTTACGCCACCC ATCCAAACATCTTCACGCTCACCCCCAGCCCAAGCCAGGCAGAATCCGGTTCCACCCCTG CCCGGGGCACCACTGGCATCCCTCCCCTACCACCCCCAATCCCTCTTTACGCCACCC CTCTCAACCCAGGGAAGCCCAGGTGCCCAGATGTGACGCCACTGACTTGAGCATTAGTGG TTAGAGAGAAGCGAGGTTTTCGGTCTGAGGGGCGGCTTGAGATCGGTGGAGGGAAGCGGG AGATAGAGGACCCCAAATAATCCCTTCATGCCAGTCCTGGACCATCTGGTGGTGGACTTC TCAGGCTGGGCCACCCCCAGCCCCCTTGCTGCTTAAACCACTGGGGACTCGAAGTCAGAG CTCCGTGTGATCAGGGAAGGGCTGCTTAGGAGGGCAGCGTCCAGGCTCTGCCAGACAT CTCCGTGTGATCAGGGAAGGGCTGCTTAGGAGAGGGCAGCGTCCAGGCTCTGCCAGACAT ö Length 5724; MAb; Score 5650; DB 1; Length ɔ/.
Pred. No. 0.00e+00; antibody; oŧ /*tag= a /product= Tumour rejection antigen MAGE-1. /product= The CDS is not indicated in the text opecification but is suggested in the layout of the sequence." monoclonal immunoassay; cancer; ss. Location/Qualifiers 481

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Query Match 42.6%;
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Matches 2419; Conservative
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072476;
21-JUN-1995 (first entry)
Tumour rejection antigen E encoding DNA.
Tumour rejection antigen E; melanoma antigen-3; MAGE-3;
cancer: cytolytic T cells; antigen D; human leucocyte antigen;
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BOOT-falleur T, Gaugler B, Van DEN
WPI: 94-333192/4!
New tumour rejection antigen precurso
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nd diagnosis of cancer
Page 58; 105pp; English
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17-MAR-1994; U02877.
26-MAR-1993; US-037230.
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Q72476 encodes tumour rejection antigen E, another sequence Q72470 encodes melanoma antigen-3 (MAGE-3) a tumour rejection antigen precursor. Melanomas characterised by the expression of MAGE-3 can be detected, or monitored, by contacting a test sample with an agent that can recognise MAGE-3. The melanoma can be treated by the administration of cytolytic T cells specific for the complex o antigen D (the mature rejection antigen derived from MAGE-3) and a hu leucocyte antigen (esp. HAI-A1).
Sequence 2419 BP; 562 A; 581 C; 677 G; 599 T;
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                                                                                                                                                     Score 2419; DB 1; I
Pred. No. 0.00e+00;
0; Mismatches 0;
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US-08-190-411A-1.rng

ing a human tumour rejection antigen or immunostimulant in a vaccine for cancers, also useful in diagnosis 147p; English.

he stable antigen E. This antigen is expressed F and A. by the human melanoma cell line M22-f and A. by the human melanoma cell line M22-f and A. by the human melanoma cell line M22-f and A. by the human melanoma cell line M22-f a cource for the isolation of this sequence. A contain three exons. The open reading frame ined within the first two exons. An ATG is of exon 3 and is followed by an 82B base pair ee exons contain 65, 73 and 1551 base pairs. this sequence two different but closely reated ied. These cDNAs, when tested, did not antigen E, but they did show substantial antigen E, but they did show substantial ered to as melanoma antigens (MAGE) (see also 2160 5415 CTTTGGGAAACTGCAGTTCCTTCTGGGGGAGCTGATTGT 2400 TTATACCTCAGTCTATTCTGTAAAATTTTTAAAGATATA 2040 CTTCTTTGAGAATGTAAGAGAAATTAAAATCTGAATAAAG 2100 A; human; melanoma; cell line; MZ2-MEL; open reading frame; homology; MAGE; RES. E, Lurquin C, Traversari C; ruggen P, Van Pel A; 677 G; ΰ 581 BP

AATTCTTCCTGTTCACTGGCTCTTTTCTTCTTCTGCACTGAGCATCTGCTTTTTGGAAG CAGGTGCCGGACAGTGATCCCGCACGCTATGAGTTCCTGTGGGGTCCAAGGGCCCTCGCT TGTTCTCAGTAGTAGGTTTCTGTTCTATTGGGTGACTTGGAGATTTATCTTTGTTCTCTT TATGAATGACAGCAGTCACACAGTTCTGTGTATATAGTTTAAAGGGTAAGAGTCTTGTGTT AGGCTTCCTGATAATTGTCCTGGTCATGATTGCAATGGAGGGCGGCCATGCTCCTGAGGA GTTGCAGCCAAGGCCAGTGGGAGGGGGACTGGGCCAGTGCACCTTCCAGGGCCGCGTCCA GCTGGTCTTTGGCATTGACGTGAAGGAAGCAGACCCCCACCGGCCACTCCTATGTCCTTGT CACCTGCCTAGGTCTCTCCTATGATGGCCTGCTGGGTGATAATCAGATCATGCCCAAGAC g qq g g g ద δy δ g g QY g δý g οy g οy g ò 셤 DP OY g οy δy δý ò Qλ δ g ò g QΥ οy Q

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antigen
                                                                              TAGAGTCTAGGAGCTGCAGTCACGTAATCGAGGTGGCAAGATGTCCTCTAAAGATGTAGG
                                                                                                                                                                          GAAAAGTGAGAGGGGTGAGGGTGTGGGGCTCCGGGTGAGAGTGGTGGAGAGTGTCAATGC
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                                                             diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               precursor
Example 20; Page 69-70; 121pp; English.
A gene sequence (T05086) hybridizes with a 2.4 kb fragment frohuman melanoma cell line MZ2-MEL but not with E- antigen loss variants of MZ2-MEL. This E precursor antigen gene sequence we cosmid derived from DNA of the E+ subclone MZ2-MF obtd. from a cosmid derived from 560 A; 581 C; 677 G; 601 T;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.

No 952874-A1.

No 952873874-A1.

No 952873874-A1.

No 952874-A1.

No 952874-A1.

No 952874-A1.

No 1-MAR-1994; US-209172.

No 1-MAR-1994; US-209172.

No 1-MAR-1994; US-346774.

No 1-MAR-1995; US-346774.

No 1-MAR-1994; US-340586/41.

No 1-MAR-1994; US-340586/41.

No 1-MAR-1994; US-340586/41.

No 1-MAR-1994; US-340586/41.

No 1-MAR-1995; US-340586/41.

No 1-MAR-1996; US-340586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 2419;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           42.6%; Score 2415; DB 1; L. arity 99.9%; Pred. No. 0.00e+00; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             antigen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          perermn. of cancerous condition(s) - usin
primer to determine expression of a MAGE
precursor
                                                                                                                                                                                                                                                                                                                                                                                                                           26-FEB-1996 (first entry)
MZ2-MEL antigen E precursor gene.
Melanoma; MZ2-MEL; tumour rejection
                                                                                                                                                                                                                                                                                                                                                                                              BP.
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5656 AATGATCTTGGGTGGATCC 5674 SULT 7 072472 standard; DNA; 2420 BP. 072472; 21-7047155 (first entry) Tumour rejection antigen E precursor gene DNA. Tumour antigen rejection precursor E; melanoma antig	Agneric Cyclyllo 1 certs, antigen b, number redcocyce antigen; S MO9423031-A. 13-OCT-1994. 17-MAR-1993; US-037230. (LUW+) LUDWIG INST CANCER RES. Boon-falleur T. Gaugler B, Van DEN EYNDE B, Van DER BRUGGEN P	DR WPI: 94-33192/41. PT New tumour rejection antigen precursor MAGE3 - useful in retartment and diagnosis of cancer. PT treatment and diagnosis of cancer. PS Example 20; Page 28; 105pp; English. CC Q72472 is the tumour rejection antigen. E precursor gene, another. CC gene Q72470 encodes melanoma antigen. 3 (MAGE-3) also a tumour rejection. CC antigen precursor. Melanomas characterised by the expression of MAGE-3. CC can be detected, or monitored, by contacting a test sample with an	CC agent that can recognise MACE-3. The melanoma can be treated by the CC administration of cytolytic T cells specific for the complex of antigen CC D (the mature rejection antigen derived from MAGE-3) and a human CC leucocyte antigen (esp. HLA-AI). SQ Sequence 2420 BP; 562 A; 582 C; 677 G; 599 T; Ouerv Match 42.5%: Score 2413: DB 1: Length 2420:	Matches 2419; Conservative 0; Mismatches 0; Indels 1; Gaps 1; Db I GGATCCAGGCCTGCCAAAAATATAAGGCCCTGCGTGAGAACAGAGGGGTCATCC 60	Oy 3256 GGATCCAGGCCTGCCAGGAAAATATAAGGGCCCTGCGTGAGAACAGGGGGTCATCC 3315 Db 61 ACTGCATGAGAGTGGGGATGTCACAGAGGCCCCCCCCTGCTGGTAGCACTGAGAAGC 120	Db 121 CAGGGCTGTGCGGTCTGCACCCTGAGGGCCCGTGGATTCCTCTGCAGGCTCCA 180	Db 181 GGAACCAGGGAGTGAGGCCTTGGTCTGAGATACCTCAGGTCACAGAGCAGAGGATG 240	Db 241 CACAGGGTGCCAGCAGTGAATGTTTGCCCTGAATGCACCACCACCTGCCA 300	Db 301 CAGGACACATAGGACTCCACAGAGTCTGGCCTCACCTCCTACTGTCAGTCCTGTAGAAT 360	Db 361 CGACCTCTGCTGGCCGGCTGTACCCTGAGTACCCTCTCACTTCCTCCAGTTTTCAG 420	Db 421 GGGACAGGCCAACCCAGAGGACAGGATTCCCTGGAGGCCACAGAGCACCAAGGAGAA 480	Db 481 GATCTGTAAGTACGCCTTTGTTAGAGTCTCCAAGGTTCAGTTCTCAGCTGAGGCCTCTCA 540	Db 541 CACACTCCTCTCCCCAGGCCTGTGGGTCTTCATTGCCCAGCTCCTGCCCACACTCCT 600
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Q9-0cT-1995 (first entry)
Human melanoma antigen MAGE-1.
Human melanoma antigen; MAGE-1; vaccines; MAGE as HrA-restricted cytotoxic T-lymphocyte activity;
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example 1; Fig 1; 59pp; English.

Example 1; Fig 1; 59pp; English.

085435 encodes R70999 human melanoma antigen MAGE-1, it was used to produce the C-terminal MAGE-1 peptides described in R70915 to R70969. These peptides are useful for defining epitopes that engender a HIA-restricted cytotoxic lymphocyte activity against MAGE-1 antigens. Compsns. containing these peptides can be administered, as a vaccine to patients susceptable to MAGE associated tumours, e.g. melanomas.

Sequence 2420 BP; 562 A; 582 C; 677 G: 600 m.
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Best Local Similarity 100.0%;
Matches 2419; Conservative
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cancer; cytolytic T cells; antigen D; human leucocyte antigen;
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Tumour rejection antigen; melanoma
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· 8	6	CCCTGAGTGAGCACAGAGGGACCCTCCACCCAAGTAGAGTGGGGACCTCA 205	
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q X	3979	CAGACCGCTTCTTCCTCTTCTACTCTAGTGGAAGTTACCCTGGGGAAGGTGCCTGCTGCC 2765	
ag y	2766	GACTCACCGAGTCCTCCCACAGTCCTCAGGAGCCTCCAGCTTCTGACTACCATCAAC 2825	
do Oy	2826	TACACTCTTTGGAGACAATCCGATGAGGGCTCCAGCAACAAGAAGGGGGGCCAAGA 2885	
g &	2886	ATGITICCCGACCTGGAGTCCGAGCAGCAGCAGCAGGAGGAGGGTGGAGTG 2945	
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AGTGTCTTCGCACATCCCAGGAAGCTGCTCATGCAAGATCTGGTGCAGGAAACTACCTG TACTTGCAGCTGGTCTTTGGCATCGAGGTGGTGGAAGTGGTCCCCATCAGCCACTTGTAC GICCITGICACCIGCCIAGGICTCTCCTATGATGGCCTGCTGGGTGATAATCAGATCATG GCCCTCATTGAAACCAGCTATGTGAAAGTCCTGCACCATACACTAAAGATCGGTGGAGAA CCCCATCCATTAGCTTCCACTGCCTCGTGTGATATGAGGCCCCATTCCTGCCTCTTTGAAG AGAGCAGTCAGCATTCTTAGCAGTGTTTCTGTTCTGTTGGATGACTTTGAGATTTATC ATCCTTGTCACCTGCCTGGGCCTCTCCTACGATGGCCTGCTGGGGCGACAATCAGGTCATG CCTGAGGAGAAAATCTGGGAGGAGCTGAGTATGTTGGAGGTGTTTGAGGGGAGGAC GAGTACCGGCAGGTGCCCGGCAGTGATCCTGCATGCTACGAGTTCCTGTGGGGTCCAAGG

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PW W0220356-A.

PW W0220356-A.

PP 26-NOV-1992; UG-705702.

PP 23-MAY-1991; UG-70838.

PR 23-MAY-1991; UG-70838.

PR 12-DEC-1991; UG-70838.

PR 12-DEC-1991; UG-708438.

PR 12-DEC-1991; UG-70838.

PR 12-DEC-1991
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Pred. No. 0.00e+00;
0; Mismatches 623; Indels 85
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2958. .3542
                         5401 TCTGCTTTTTGGAAGGCCCTGG 5422
4126 TCTGCTCTGTGGAAGGCCCTGG 4147
                                                                                                                                                                  BP.
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78.7%;
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MAGE-2 gene.
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Matches 2614; Conservative
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1396 1513 1573 2862 1633 1692 2981 1812 1871 1931 2348 3451 3511 2630 TAAAGATGAGTGAGACAGACAAGGCTATTGGAATCCACACCCCAGAACGAGCTCAG 3102 AGGACACATTAATTCCAATGAATTTTGATATCTTGCTGCCCTTCCCCAAGGACCTAGG 1277 AGGAGCTGTCTGCTCATTTCAGGGGGTTCCCCCTTGAGAAAGGGCAGTCCCTGGCAGGAG 1337 TAAAGATGAGTAACCCACAGGAGGCCATCATAACGTTCACCCTAGAACCAAAGGGGTCAG TCAGGGAGTTGATGACCTTGTTTTCAGAAGGTGACTCAG-TCAACACAGGGGCCCC--TC 1514 TGGTCGACAGATGCAGTGGTTCTAGGATCTGCCAAGCATCCAGGTGGAGAGCCTGAGGTA GGGATCTTTGATGTCAGGGAAGGGGAGGCCTTGGTCTGAAGGGGCTGGAGTCAGGTCAGT 2982 GGGATCATTGATGTCAGGGACGGGAGGCCTTGGTCTGAGAAGGCTGCGCTCAGGTCAGT 3042 AGAGGGAGCGTCCCAGGCCCTGCCAGGAGTCAAGGTGAAGGTGAGGACCAAGCGGGGCACCTCACCC 1872 CACGTATGGCCAGATGTGGGTCCCCTCTATCTCCTTCTGTACCATATCAGGGATGTGAGT 1932 TCTTGACATGAGAGATTCTCAAGCCAGCAAAAGGGTGGGATT-AGGCCCTACAAGGAGAA 1991 AGGTGAGGCCCCTGAGTGAGCACAGAGGGGACCCTCCACCCAAGTAGAGTGGGGACCTCA 3279 ATATAAGGGCCCTGCGTGAGAACAGAGGGGGTCATCCACTGCATGAGAGTGGGGATGTCA 2289 CCAGAGGGCCTGGCCTCCCTTCTCAGTCCTGCAGCCTGAGCATGTGCTGGCC CCCTGGACAACGCACGTGGGGTAACAGGATGTGGCCCCTCCTCACTTGTCTTTCCAGATC GGATTGAGGGTACCCCTGGGCCAGAATGCAGCAAGGGGGCCCCATAGAAATCTGCCCTGC 2863 GGACTGAGGGTACCCCAGGACCAGAACACTG-AGGGAGACTGCACAGAAATCAGCCCTGC AGAGGGAGGGTCTCAGGCCCTGCCAGGAGTGGACGTGAGGACCAAGCGGACTCGTCACCC AGGACACCTGGACTCCAATGAATTT-GACATCTCTCGTTGTCCTTCGCGGAGGACCTGGT 2051 CGGAGTCTGGCCAACCCTGCTGAGACTTCTGGGAATCCGTGGCTGTGCTTGCAGTCTGCA 2111 CACTGAAGGCCCGTGCATTCCTCTCCCAGGAATCAGGAGCTCCAGGAACCAGGCAGTGAG

4628 GAGTAC-GGCAGGTGCCGGACAG	3426	3486	3546	b 3606 CCCCATCCATTAGCTTCCACTGCCTC	3666	3726	3785	3845	3905 A 5161 A	3964 TAC-AAGGAACTCAA 5221 AGAACTAAAGAAATTAA	4021	4069 TARATCTGATAAATTCTTC	b 4126 TCTGCTCTGGAAGGCCTGG 414 	072483 standa		KW ss. S Home sapiens. Location/Qualif FT CDS 625. 1578	1 / rcgg = a W09423031-A. D 13-OCT-1994. F 17-MRR-1994; U02877.	
CTCACC-TCCCTACTGTCAGTCCTGTAGAATCGACCTCTGCTGGCC 3630	DD DD	2467 3748	Db 	Db	2645 3928	2705 3978	DD CTCTTCTACTCTAGTGGAAGTTACCCTCGGGAAGTGCCTGCTGCC 2765	2825	2885 4147	2945 4207	3005 4267	3065 4327	DD CTTTGGCATCGAGGTGGAAGTGGTCCCCATCAGCCACTTGTAC 3125	CCCTGGGCCTCTCCTACGATGGCCTGCTGGGGGCAATCAGGTCATG 3185 R.	3245 4507	3305 4567	F ATTCCCAGGAAGCTGCTCATGCAGGAAAACTACCTG 3365 F F F F F F F F F F F F F F F F F F F	IGCCCGGCAGTGATCCTGCATGCTACGAGTCCTGTGGGGTCCAAGG 3425 PIIII
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Van DEN EYNDE B, Van DER BRUGGEN P;
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anoma antigen-41; MAGE-41; MAGE-3;
tigen D; human leucocyte antigen;
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    reatment and diagnosis of cancer Discolaure; Page 68; 105pp; English.

072483 is the gene which contains the coding sequence for melanoma antigen-41 (MAGE-41). Another melanoma antigen precursor. Melanomas antigen-41 (MAGE-41). Another melanoma antigen precursor. Melanomas characterised by the expression of MAGE-3 can be detected, or monitored, by contacting a test sample with an agent that can recognise MAGE-3. The melanoma can be treated by the administration of cytolytic T cells specific for the complex of antigen D (the mature rejection antigen derived from MAGE-3) and a human leucocyte antigen (esp. HLA-A1).
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Pred. No. 0.00e+00;
0; Mismatches 327; Indels
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Best Local Similarity 84.3%;
Matches 2068; Conservative
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Example 30; Page 66; 105pp; English.

O72482 is the gene which contains the coding sequence for melanoma antigen-4 (MAGE-4). Another melanoma antigen MAGE-3 is encoded by O72470, this is a tumour rejection antigen precursor. Melanomas characterised by the expression of MAGE-3 can be detected, or monitored, by contacting a test sample with an agent that can recognise MAGE-3. The melanoma can be treated by the administration of cytolytic T cells specific for the complex of antigen D (the mature rejection antigen derived from MAGE-3) and a human leucocyte
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Tumour rejection antigen MAGE-4 gene.
Tumour rejection antigen; melanoma antigen-4; MAGE-4; MAGE-3;
cancer; cytolytic T cells; antigen D; human leucocyte antigen;
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(LUDW-) LUDWIG INST CANCER R.
Boon-falleur T, Gaugler B,
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Query Match Best Local Similarity

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PR 09-JUL-1991; US-706302.

PR 09-JUL-1991; US-70636.

PR 12-DEC-1991; US-70636.

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Pred. No. 0.00e+00;
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                      2376
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The sequences given in 032352-69 represent a new family of genes referred to as melanoma antigens (MAGE). The CDNAs of this gene family were identified during the isolation of the antigen E gene. The MAGE CDNAs, when tested, did not transfer expression of antigen E, but they did show substantial homology to the antigen E cDNA sequence. The MAGE DNAs share a certain degree of homology with each other and are expressed in tumour cells including several types of human tumor cells as well as in human tumors. MAGE expression is not restricted to melanomas. MAGE refers to a family of tumor rejection antigen precursors. The antigens resulting from these genes are referred to as MAGE TRAS or melanoma antigen tumor rejection antigens.
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                                                                                                                                                                               melanoma antigen; MAGE TRA; melanoma antigen tumor rejection antigen;
tumor rejection antigen precursor; MAGE; antigen E; gene family; ss.
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Pred. No. 0.00e+00;
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Nucleic acid mol. encoding a human tumour rejection antigen
precursor - useful as an immunostimulant in a vaccine for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        630 T;
                                                                 22.MAY 1992; U04354.
23.MAY 1991; US-705702.
09-JUL-1991; US-705838.
23.SEP-1991; US-764364.
12-DEC-1991; US-807043.
12-DEC-1991; US-ROTORER RES.
BOON T, Chomez P, De Plaen E, Lurquin C, Traversari C; Van Den Eynde B, Van Der Bruggen P, Van Pel A;
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Q32358;
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Best Local Similarity 84.3%;
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Disclosure; Page 72; 105pp; English.

Q72486 is the genomic DNA which contains the coding sequence for C72486 is the genomic DNA which contains the coding sequence for melanoma antigen-51 (MAGE-51). Another melanoma antigen MAGE-3 is encoded by Q72470, this is a tumour rejection antigen precursor. Melanomas characterised by the expression of MAGE-3 can be detected, or monitored, by contacting a test sample with an agent that can recognise MAGE-3. The melanoma can be treated by the administration of cytolytic T cells specific for the complex of antigen D (the mature rejection antigen derived from MAGE-3) and a human leucocyte antigen (esp. HLA-A1).
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                                                                                                              Tumour rejection antigen MAGE-51 genomic DNA.

Tumour rejection antigen; melanoma antigen-51; MAGE-51; MAGE-3; cancer; cytolytic T cells; antigen D; human leucocyte antigen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DER BRUGGEN
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Pred. No. 0.00e+00;
0; Mismatches 299; Indels
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. Van DEN EYNDE B,
                                                                                                                                                                                                                                                   Location/Qualifiers
645. .992
                                  BP.
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(LUDW-) LUDWIG INST CANCER R
Boon-falleur T, Gaugler B,
WPI; 94-333192/41.
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Best Local Similarity 84.1%;
Matches 1956; Conservative
T 15
Q72486 standard; DNA; 2305
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22-JUN-1995
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US-08-190-411A-1.rng

5129 2018 1843 1903 5189 5249 5427 1784 5011 5071 1961 2077 5307 2137 2197 2257 5367 5487 CGAGGGGGGTGGGCCAGTGCACCTTCCAGGGCTCCGTCCAGTAGTTTCCCCTGCCTTAA 1664 4894 TGTGACATGAGGCCCATTCTTCACTCT--GAAGAGAGGGGTCAGTGTTCTCAGTAGGAGG TGTGACATGAGGCCCATTCTTCTTTTGAAGAGAGCAGTCAACATTCTTAGTAGTGGG TITCTGTTCTATTGGATGACTTTGAGATTTGTCTTTGTTTCCTTTTGGAATTGTTCAAAT AAATCCATTCCATTTGTGAATTGGGACA-TAGTTACAGCAGTGGAA-TAAGTATTCATT TCACTGGCTCATTTATTCTCTTATGCACTGAGCATTTGCTCTGTGGAAGGCCCTGGGTTAA TAGTGGAGATGCTAAGGTAAGCCAGACTCACCCCTACCCACAGGGTAGTAAAGTCTAGGA 1605 1665 1725 4952 1785 5012 1844 5072 1904 5130 1962 5190 5250 2078 5308 5368 5428 5488 2019 2138 2198 2258 원 ò g õ a ò q Q D 9 9 9 9 oy Oy g ٥y g δ g ö g οy

Search completed: Tue Apr 7 20:51:08 1998 Job time : 508 secs.

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Release 2.1D John F. Collins, Biocomputing Research Unit. Copyright (c) 1993, 1994, 1995 University of Edinburgh, U.K. Distribution rights by IntelliGenetics, Inc.

n.a. - n.a. database search, using Smith-Waterman algorithm MPsrch_nn Tue Apr 7 20:51:27 1998; MasPar time 301.84 Seconds 943.881 Million cell updates/sec Run on:

Tabular output not generated.

>US-08-190-411A-1 (1-5674) from 5541104.seq 5674

Description:
Perfect Score:
N.A. Sequence:
Comp:

1 CCCGGGGCACCACTGGCATC.......TAATGATCTTGGGTGGATCC 5674 GGGCCCCGTGGTGACGTAG.....ATTACTAGAACCCACCTAGG

TABLE default Gap 6 Scoring table:

Dbase 0; Query 0 STD Nmatch

96465 seqs, 25105746 bases x 2 Searched:

Minimum Match 0% Listing first 45 summaries Post-processing:

Database:

n-issued 1:backl 2:51 3:52 4:53 5:54 6:55 7:56 8:57 9:PCT90 10:PCT91 11:PCT92 12:PCT93 13:PCT94 14:PCT95 15:PCT96

Mean 10.059; Variance 5.500; scale 1.829 Statistics:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SIMMARIES

					SUMMARIES		
Result No.	Score	& Query Match	% Query Match Length DB	88	ID	Description	Pred. No.
1	5674	100.0	5674	7	US-08-299-	Sequence 8, Applicatio	o 0.00e+00
7	5674	100.0	5674	9	US-08-190-	٠ ٦	o 0.00e+00
m	5674	100.0	5674	4	US-07-807-	Sequence 8, Applicatio	0.00e+00
4	2419	42.6	2419	4	us-07-807-	Sequence 7, Applicatio	o 0.00e+00
S	2419	42.6	2419	7	us-08-299-	Sequence 7, Applicatio	0.00e+00
9	1483	26.1	4157	7	us-08-299-	Sequence 9, Applicatio	0
7	1483	26.1	4157	4	US-07-807-	Sequence 9, Applicatio	o 0.00e+00
ω	1399	24.7	2531	7	us-08-299-	13,	i 0.00e+00
σ	1399	24.7	2531	^	US-08-299-	14,	i 0.00e+00
10	1225	21.6	2305	7	US-08-299-	Sequence 17, Applicati	i 0.00e+00
11	943	16.6	2226	7	US-08-299-	16,	i 0.00e+00
12	811	14.3	1640	7	us-08-299-	Sequence 11, Applicati	i 0.00e+00
13	811	14.3	1640	4	- LOS-01-801	Sequence 11, Applicati	i 0.00e+00
14	682	12.0	1067	4	US-07-807-	13, 1	i 0.00e+00
15	683	12.0	1068	7	US-08-299-	Sequence 15, Applicati	i 0.00e+00
16	645	11.4	1412	7	US-08-299-	Sequence 21, Applicati	i 0.00e+00
17	611	10.8	1947	7	us-08-299-	Sequence 19, Applicati	i 0.00e+00
18	562	9.6	1810	7	US-08-299-	Sequence 20, Applicat	i 0.00e+00
19	392	6.9	1107	7	US-08-299-	Sequence 23, Applicat	i 3.65e-272

1.17e-239 1.17e-239 1.17e-239 2.20e-124 2.20e-104 1.93e-86 1.93e-86 1.53e-77 2.224e-72 2.24e-72 2.24e-72 2.24e-72 3.66-41 6.69e-14 6.69e-14 6.69e-14 7.60e-18 6.70e-18 6.70e-18 7.70e-18 7.70e-18 7.70e-18 7.70e-18	37e-03 1.13e-03 1.37e-03
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ALIGNMENTS

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Sequence 8, Application US/08299849B.
Sequence 8, Application US/08299849B
Sequence 8, Application US/08299849B
Sequence 8, Application
GENERAL INFORMATION:
APPLICANT: De Plaen, Etienne; Boon-Falleur, Thierry;
APPLICANT: Chomez, Partick
TITLE OF INVENTION: Isolated Nucleic Acid Molecules Useful In
TITLE OF INVENTION: Determining Expression Of A Tumor Antigen Precurso
                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSE: Felfe & Lynch
STREET: 805 Third Avenue
STREET: New York City
STATE: New York
ZIP: 10022
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
            US-08-299-849B-8 STANDARD; DNA; UNC; 5674 BP.
                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM
COMPUTER: IBM
COMPUTER: IBM
COMPUTER: COMPUTER: COMPUTER: CONTRACTOR OF CALCASING SYSTEM: PC-DOS
SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
PILING DATE: 1-SEPTEMBER-1994
CLASSIFICATION DATA:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                            01-JAN-1900
RESULT
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720

1020 1020 1080 11080 11140 1200 1200 1260

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ACTGAGGAGGCACACCCCCAGGTAGATGGCCCCAAAATGATCCAGTACCACCCCTGCTG
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                                                                                                                                                                                                                         Length 5674;
                                                                                                                                                                                              NAME/KEY: MAGE-1 gene
Sequence 5674 BP; 1276 A; 1644 C; 1569 G; 1185 T; 0 other;
                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                       Match 100.0%; Score 5674; DB 7; I
Local Similarity 100.0%; Pred. No. 0.00e+00;
es 5674; Conservative 0; Mismatches 0;
                                                                             5355
                                            ATTORNEY AGENT INFORMATION:
NAME: Hanson, No. 5612201man D.
REGISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 5355
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 838-3884
INFORMATION FOR SEO ID NO: 8:
07/728,838
9-JULY-1991
                           07/705,702
                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 5674 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: genomic DNA
                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/70
FILING DATE: 23-May-1991
         NUMBER:
  NUMBER:
 APPLICATION
APPLICATION
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GENERAL INFORMATION:
APPLICANT: Chen, Yao-Tseng; Stockert, Elisabeth;
APPLICANT: Chen, Yao-Tseng; Stockert, Pilar; Rettig, Wolfgang JAPLICANT: Chen, Yachi; Garin-Chesa, Pilar; Rettig, Wolfgang JAPLICANT: van der Bruggen, Pierre; Boon-Falleur, Thierry;
APPLICANT: Old, Lloyd J.
TITLE OF INVENTION: MONOCLONAL ANTIGEN PRECURSOR MAGE-1,
                  TTCAGCATCCAAGTTTATGAATGACAGCAGTCACACAGTTCTGTGTATATAGTTTAAGGG
                                                                                                                                                 ATTTTTAAAGATATATGCATACCTGGATTTCCTTTGGCTTCTTTGAGAATGTAAGAGAAAT
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IITLE OF INVENTION: AND MAGE-1 DERIVED IMMUNGENIC PEPTIDES
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MEDIUM TYPE: Diskette, 5.25
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STREET: 805 Third Avenue
CITY: New York City
STATE: New York
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CORRESPONDENCE ADDRESS:
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Sequence 1, Application
Sequence 1, Application
Patent No. 5541104
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                               CACTGCTGGGTCAACAGATCCTCCCCAGAGTCCTCAGGGAGCCTCCGCCTTTCCCACTAC
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Sequence 5674 BP; 1276 A; 1644 C; 1569 G; 1185 T; 0 other;
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Pred. No. 0.00e+00;
0; Mismatches 0;
                         APPLICATION NUMBER: 037,230
FILING DATE: 26-MARCH-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/04354
FILING DATE: 22-MAY-1992
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
FILING DATE: 12-DECEMBER-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION NUMBER: 07/728,838
APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION NUMBER: 9-JULY-1991
                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: LUD 5354 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                            NAME: Hanson, No. 5541104man D. REGISTRATION NUMBER: 30,946
                                                                                                                                                                              07/705,702
 01-FEBRUARY-1994
                                                                                                                                                                                                                                                 TELEPHONE: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 5674 base pairs
                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/70
FILING DATE: 23-MAY-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: genomic DNA
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Best Local Similarity 100.0%;
Matches 5674; Conservative
                 PRIOR APPLICATION DATA:
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FILING DATE: 01 CLASSIFICATION:
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J. Thierry, Van den Eynde, Beno t
LON: Tumor Rejection Antigen Precursors, Tumor
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Sequence 5674 BP; 1276 A; 1644 C; 1569 G; 1185 T; 0 other;
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Pred. No. 0.00e+00;
0; Mismatches 0
                       COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 360 kb
                                                                          APPLICATION NUMBER: US/07/807,043B
FILING DATE: 19911212
                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
PRIOR PELLORATION DATA:
APPLICATION NUMBER: 07/728,838
FILING DATE: 9-JULY-1991
PRIOR APPLICATION NUMBER: 07/705,702
FILING DATE: 23-May-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                      LUD 253
                                                                                                                                                                                     NAME: Hanson, No. 5342774man D. REGISTRATION NUMBER: 30,946
                                                                                                                                                                                                                    TELEPHONE: (212) 688-9200
TELEPAX: (212) 838-384
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 5674 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: singular
                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: LU
TELECOMMUNICATION INFORMATION:
                                                 OPERATING SYSTEM: PC-DOS
                                                                                                                                                                                                                                                                                         MOLECULE TYPE: genomic DNA
                                                         SOFTWARE: Wordperfect CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                              100.0%;
al Similarity 100.0%;
5674; Consermant
       New York
                                                                                  FILING DATE: 19
CLASSIFICATION:
                                        IBM
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Sequence 7, Application US/07807043B
Patent No. 3342774
GENERAL INFORMATION:
APPLICANT: BOON, Thierry, Van den Eynde, Beno t
TITLE OF INVENTION:
TITLE OF INVENTION: Rejection Antigen Precursors,
TITLE OF INVENTION: Rejection Antigens and Uses Thereof
CORRESPONDENCE ADDRESS: BP DNA; UNC; 2419 Felfe & Lynch STANDARD;

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                                                 storage
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MOLECULE TYPE: genomic DNA
Sequence 2419 BP; 562 A; 581 C; 677 G; 599 T; 0 other;
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Pred. No. 0.00e+00;
0; Mismatches 0
                                               MEDIUM TYPE: Diskette, 5.25 inch, 360 kb
                                                                           SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/807,043B
FILING DATE: 19911212
                                                                                                                                                                                                                                              LUD 253.3
                                                                                                                                                                                                                         NAME: Hanson, No. 5342774man D.
REGISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 253.3
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 688-9200
TELEPAX: (212) 888-3884
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
LENGTH: 2419 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: singular
                                                                                                              CLASSIFICATION: 424
PRIOR APPLICATION 544.364
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPPEMBER-1991
PRIOR APPLICATION NUMBER: 07/728,838
FILING DATE: 9-JULY-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/705,702
FILING DATE: 23-May-1991
ATTORNEY/AGENT INFORMATION:
805 Third Avenue
                                                                  OPERATING SYSTEM: PC-DOS
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Best Local Similarity 100.0%;
Matches 2419; Conservative
                                      COMPUTER READABLE FORM:
          New York City
                   New York
                                                         IBM
                           10022
                                                         COMPUTER:
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Tumor Antigen Precurso
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                                                                                                                                    storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: genomic DNA
Sequence 2419 BP; 562 A; 581 C; 677 G; 599 T; 0 other;
Determining Expression Of A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 42.6%; Score 2419; DB 7; I
Best Local Similarity 100.0%; Pred. No. 0.00e+00;
Matches 2419; Conservative 0; Mismatches 0;
                                                                                                                                  MEDIUM TYPE: Diskette, 5.25 inch, 360 kb COMPUTER: IBM
                                                                                                                                                                       SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/08/29,849B
FILING DATE: 1-SEPTEMBER-1994
CLASSIFCATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/037,230
FILING DATE: 26-MARCH-1993
PRIOR APPLICATION NUMBER: PCT/US92/04354
FILING DATE: 22-MAY-1992
PRIOR APPLICATION NUMBER: PCT/US92/04354
FILING DATE: 12-MAY-1992
APPLICATION NUMBER: 07/807,043
FILING DATE: 112-DECEMBER-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Hanson, No. 5612201man D.
REGISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 5355
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 688-9200
TELEPHONE: (212) 688-9200
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/728,838
APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION NUMBER: 07/705,702
FILING DATE: 23-May-1991
ATTORNEY/AGENT INFORMATION:
                         NUMBER OF SEQUENCES: 48
CORRESPONDENCE ADDRESS:
ADDRESSE: Felfe & Lynch
STREET: 805 Third Avenue
CITY: New York City
                                                                                                                                                          OPERATING SYSTEM: PC-DOS SOFTWARE: Wordperfect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 2419 base pairs
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                                                                                                      ZIP: 10022
COMPUTER READABLE FORM:
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TITLE OF INVENTION:
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                                                                                             New York
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               4816 GTTGCAGCCAAGGCCAGTGGGAGGGGGACTGGCCAGTGCACCTTCCAGGGCCGCGTCCA
                                                                 AGTACTTAGAAATGTGAAAAATGAGCAGTAAAATAGATGAGATAAAGAACTAAAGAAATT
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  GTTGCAGCCAAGGCCAGTGGGAGGGGGACTGGGCCCAGTGCACCTTCCAGGGCCGCGTCCA
                                                      GCAGCTTCCCCTGCCTCGTGTGACATGAGGCCCCATTCTTCACTCTGAAGAGAGGGGTCAG
                                                                                                         TGTTCTCAGTAGTAGGTTTCTGTTCTATTGGGTGACTTGGAGATTTATCTTTGTTCTTT
                                                                                                                                                             TATGAATGACAGCAGTCACACAGTTCTGTGTATATAGTTTTAAGGGTAAGAGTCTTGTGTT
                                                                                                                                                                                                                                5056 TAIGAATGACAGCAGTCACACAGTTCTGTGTATATAGTTTAAGGGTAAGAGTCTTGTGTT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: De Plaen, Etienne; Boon-Falleur, Thierry; APPLICANT: Leth, Bernard; Szikora, Jean-Pierre; De APPLICANT: Chomez, Patrick TITLE OF INVENTION: Isolated Nucleir Arid Malacanter
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Sequence 7, Application US/08299849B
Patent No. 5612201
GENERAL INFORMATION:
APPLICANT: De Plaen, Etienne; Boo
APPLICANT: Leth, Bernard; Szikor
APPLICANT: Chomez, Patrick
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CACAGGACCACCAGGACACCAGGACCCCCACCACCACCAC																				
		301 CAGGACACATAGGACTCCACAGAGTCTGGCCTCACCTCCTACTGTCAGTCCTGTAGAAT 360	361 CGACCTCTGCTGGCCGGCTGTACCCTGAGTACCCTCTCACTTCCTCCTTCAGGTTTTCAG 420	421 GGGACAGGCCAACCCAGAGGACAGGATTCCCTGGAGGCCACAGAGGAGAA 480	GGGACAGGCCAACCCCAGAGGACAGGATTCCCTGGAGGCCACACAGAGGAGCAACAAA 3/3. GATCTGTAAGTAAGGCCTTTGTTAGAGTCTCCAAGGTTCAGTTCTCAGGGAGCACCTCTCA 540 GATCTGTAAAGTAGCCCTTTGTTAGAGTCTCCAAGGTTCAGTTCTCAGGGGCCTCTCA 540 GATCTGTAAAGTAGCCTTTTGTTTAGAGTTCTCAAGGTTCAGTTCAGGCTTTTTT 79	CACACTCCCTCTCCCCCAGGCCTGTGGGGTTCTTCATTGCCCCAGCTCCTGCCCACACTCCT 600	GCCTGCTGCCCTGAGGGGGGGGGGGTCTTCATTGCCCCGGGCTCTGGCCCGGGCTCTGGGGGGGG	661 TGAGGAAGCCCTTGAGGCCCCAACAAGAGGCCCTGGGCCTGGTGTGTGCAGGCTGCCCC 720	916 TGAGGAAGCCCTTGAGGCCCCAACAAGAGGCCCTGGGCCTGGTGTGTGT	976 CTCCTCCTCCTCTCTCTGGTCCTGGGCACCCTGGAGGAGGGGCCCACTGCTGGGTCAAC 403 781 AGATCTTCCCCCAGAGTCCTCAGGGAGCCTCCGCCTTTCCCACTACCATCAACTTCACTCG 840	AGAICCICCCAGAGICCICAGGGAGCCICCGCCITTCCCACIACCAICAACIICACICG 409	096 ACAGAGGCAACCCAGTGAGGGTTCCAGCAGCGTGAAGAGGGGGGCCAAGCACTGTTG VTC	TATCCTGGAGTCCTTGTTCCGAGCAGTAATCACTAAGAAGGTGGCTGATTTGGTTGG	TCTGCTCCTCAAATATCGAGCCAGGGGGGCCAGTCACAAAGGCAGAAATGCTGGAGAGTGT 102 	CATCAAAAATTACAAGCACTGTTTTCCTGAGATCTTCGGCAAAGCCTCTGAGTCCTTGCA 108 	GCTGGTCTTTGGCATTGACGTGAAGGAAGCACCCCACCGGCCACCCCTATGTCTTGT 114	CACCTGCCTAGGTCTCTCTATGATGGCCTGCTGGGTGATAATCAGATCATGCCCAAGC 1	AGGCTTCCTGATAATTGTCCTGGTCATGATTGCAATGGAGGGCGCCATGCTCCTGAGGA 12 	261 GGAAATCTGGGAGGAGCTGAGFGTGAFGGAGGGTGTATGATGGGAGGAGCACAGTGCCTA 132 	321 TGGGGAGCCCAGGAAGCTGCTCACCCAAGATTTGGTGCAGGAAAAGTACCTGGAGTACGG 138

1440 1500 1560 1620 4995 2100 2160 5415 2220 5475 2280 5535 2340 2400 5655 CTTTGAGAGAGGAGGAGGAGGAGTCTGAGCATGA 4815 TATTGGGTGACTTGGAGATTTATCTTTGTTCTCTT 1740 5355 CAAGATTTGGTGCAGGAAAAGTACCTGGAGTACGG 4635 AAGGTAAGCCAGACTCATACCCACCCATAGGGTCG TGAGGCCCATTCTTCACTCTGAAGAGAGCGGTCAG TITGAGAATGTAAGAGAAATTAAATCTGAATAAAG TGGGGCTCCGGGTGAGTGGTGGAGTGTCAATGC GCTATGAGTTCCTGTGGGGTCCAAGGGCCCTCGCT TTTGAGAATGTAAGAGAAATTAAATCTGAATAAAG AATCGAGGTGGCAAGATGTCCTCTAAAGATGTAGG GGACTGGGCCAGTGCACCTTCCAGGGCCGCGTCCA AGTATGTGATCAAGGTCAGTGCAAGAGTTCGCTTT CTTTGAGAGAGGAAGAGGGAGTCTGAGCATGA TCTTCTCCATGCACTGAGCATCTGCTTTTTGGAAG

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                                                                                               APPLICANT: De Plaen, Etienne; Boon-Falleur, Thierry;
APPLICANT: Leth, Bernard; Szikora, Jean-Pierre; De Smet, Charles;
APPLICANT: Chomez, Partick
TITLE OF INVENTION: Isolated Nucleic Acid Molecules Useful In
TITLE OF INVENTION: Determining Expression Of A Tumor Antigen Precurso
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      51;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 26.1%; Score 1483; DB 7; Length 41 Best Local Similarity 78.7%; Pred. No. 0.00e+00; Matches 2615; Conservative 0; Mismatches 622; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: MAGE-2 gene
Sequence 4157 BP; 953 A; 1134 C; 1185 G; 885 T; 0 other;
                                                                                                                                                                                                                                                                          Diskette, 5.25 inch, 360 kb storage
                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 435

PRIOR APPLICATION DATA:
APPLICATION NUMER: 08/037, 230
FILING DATE: 26-MARCH-1993
PRIOR APPLICATION NUMER: PCT/US92/04354
FILING DATE: 22-MAY-1992
PRIOR APPLICATION NUMER: 22-MAY-1992
PRIOR APPLICATION DATA:
APPLICATION NUMER: 07/807, 043
FILING DATE: 12-DECEMBER-1991
PRIOR APPLICATION DATA:
           US-08-299-849B-9 STANDARD; DNA; UNC; 4157
                                                                                                                                                                                                                                                                                                           SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/299,849B
FILING DATE: 1-SEPTEMBER-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Hanson, No. 5612201man D. REGISTRATION NUMBER: 30,946
REFERENCE-POCKET NUMBER: LUD 5355
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 688-9200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION DATA: 4APPLICATION NUMBER: 07/728,838
APPLICATION NUMBER: 9-JULY-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/705,702
FILING DATE: 23-May-1991
ATTORNEY/AGENT INFORMATION:
                                                Sequence 9, Application US/08299849B. Sequence 9, Application US/08299849B Patent No. 5612201
GENERAL INFORMATION:
                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: genomic DNA
                                                                                                                                                                                                                                                                                                  OPERATING SYSTEM: PC-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGIH: 4157 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           single
                                                                                                                                                                                                                        CITY: New York City
STATE: New York
ZIP: 10022
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nucleic acid
                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
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                                                                                                                                                                                                                                                                         MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS
                                                                                                                                                                                                                                                                                       COMPUTER:
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                                     01-JAN-1900
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1932 TCTTGACATGAGAGATTCTCAAGCCAGCAAAAGGGTGGGATT-AGGCCCTACAAGGAGAA 1990
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1277 AGGAGCTGTCTGCTCATTTCAGGGGGTTCCCCCTTGAGAAAGGGCAGTCCCTGGCAGGAG
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AAA 32	TCA 20	GCA 21	TGAG 21 TGAG 34	CAAC 22 CAGC 35	GACT 22 GACT 35	GGCC 23 1111 GGCC 36	GAC 24 AAC 36	TTG 24 TAG 37	CTC 25 CTC 38	CTG 25	GCCTT 26 CCCTT 39	CAG 27 39	GCC 27 GCT 40	AAC 28 AAC 40	AGA 28 	TTG 29	CTG 30 CTG 42	3AG 30 3AG 43
GCCAGGA	GGGGACC GGGGATG	GCAGTCTGC GCGGTCTGC	CAN CAN	8=8	AAATGGG ACATAGG	HILL	ACAGGCT ACAGGCC	TAAGCCTTT CTGTAAGTA	SCTCCTTCTC ACTCCCTCTC	recreco 	AGAAGGC GGAAGCC	rgaggag 	SCCTGCT SCCCACT	ACTACCATCAAC 	GGGCCAAGA 	GGTTGAGTTC GGCTGATTTC	AGAAATGCTG AGAAATGCTG	AGCCTCC(
BGCCCT	TAGAGT	STGCTT 	CAGGAACCAGG 	GACGCAGACAGT \TGCACAGGGTGT	CC-CAGAACAAATGG CCACAGGACACATAG	TGAGCATO	FGAGGGGGACAGGC 	GGAGAAGATCTGTAAGTA 	TCAGAGCCTCCAAGGTTCA-GTTCAGTTCTCACGTAAGGCCTCACACACGCT 	CAGGCCTGTGGGTCTTCATTGCCCAGCTCCTGCCCGCACTCCTGCCTG	accagagtcatcatgctttgagcagaggagtcagcactggaaggctgaagaagg 	GCCCGAGGAGGCCCTGGGCCTGGTGGGTGCGCAGGCTCCTGCTACTGAGGAGCA 	ACCGCTICITCICITCITACICIAGIGGAAGTIACCCIGGGGAGGIGCCIGCIGCC	CTCG2	CCAGCAACCAAGAAGAGGAGG 	GAAGAT(CCACAAAGGCAGA 	CTTCAGCAAAGCCTC
GGATCCA	CACCCAAGT	CGTGGCTC CAGGGCTC	$\wp - \wp$	CACAGAGCAGAGGGGA CACAGAGCAGAG	CCCACCCGCC- 	CACCCTCCCTATTCTCAGTCCTGCAGCCTGAG CACC-TCCCTACTGTCAGTCCTGTAGAATCGA		GAAGATO CCAAGGA	AGGCCTC AGGCCTC	CCCCACT	ACTGCAA ACTGCAA	AGGCTCC AGGCTGC	ccress ccresa	5=5	ACCAAGA SCCGTGA	CAAGCAGCAATCAGTAGGAAGATI CGAGCAGTAATCACTAAGAAGGTI	SGGTCAC	rccgtgatctt rcctgagatctt
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GAT-TTC	CTGAGTG CTGCGTG	PACCCI 	CGTGCATT	IGAGTCAGTG-CCTC 	SCCTGGA 	SCCTGGCCTCA 	AGGTGC AG-TAC	AGGCAC SATTCCC	AGGTTC GTCTCC	regerc 	ATGCCT ATGTCT	GAGGCC GAGGCC	TCCTCT -CCTCT	GACTCACCGAGTCCTCCCCACA GGGTCAACAGATCCTCCCCAGA	AGACAA 	CCTGGAG CCTGGAG	CTCCTC	AGAAAT AAAAAT
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TCTIG	AGGTG ATATA	CGGAG 111 CAGAG	CACTG CCTG	GCCTTC	ACTGA AGTGA	CCAGA CCACA	90016 	AAGTAGO CCAGAGO	TCAGA	10000 10	ACCAG ACGAG	GAGGC GAGGC	CAGACO CTCO	GACTC - 	TACACTCT	ATGTT ACCTC	GTTCATO	GAGAGT(GAGAGT(
3221	1991 3279	2051 3339	2111	2171	3512	3572	2349	3689	2468 3749	3809	2586 3869	3929	3979	2766	2826	2886	2946	3006
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3245 3125 4447 3305 3365 3425 4686 3485 4746 3545 4806 3605 3665 3725 5160 4020 4125 4567 4627 4866 4924 4984 3784 5044 3844 3904 3963 5220 4068 5340 5400 TACTIGCAGCTGGTCTTTGGCATCGAGGTGGTGGAAGTGGTCCCCATCAGCCACTTGTAC GICCTTGTCACCTGCCTAGGTCTCTCCTATGATGGCCTGCTGGTGGTAATCAGATCATG CCCAAGACAGGCCTCCTGATAATCGTCCTGGCCATAATCGCAATAGAGGGCGACTGTGCC 4807 IGAGCAFGAGTTGCAGCCAGTGGGAGGGGGACTGGGCCAGTGCACTTCCAGGG AACAGCAGTGGAATATGTATTTGCCTATATTGTGAACGAATTAGCAGTAAAAT-ACATGA CCTGAGGAGAAAATCTGGGAGGAGGTGTAGTTGGAGGTGTTTGAGGGGAGGAC GAGTACCGGCAGGTGCCCGGCAGTGATCCTGCTACGAGTTCCTGTGGGGTCCAAGG CCCCATCCATTAGCTTCCACTGCCTCGTGTGATATGAGGCCCCATTCCTGCCTCTTTGAAG TITCITICCTGTTGGAATTGTTCAAATGTTCCTTTT-AACAAATGGTTGGATGAACTTCA AGAGTCCTGTTTTTTTTTCAGATTGGGAAATCCATTCCATTTTGTGAGTTGTCACATAAT 5103 AGAGTCTTGTGTTTATTCAGATTGGGAAATCCATTCTATTTTGTGAATTGGGA--TAAT ATCCTTGTCACCTGCCCTCTCTCTACGATGCCCTGCTGGCCGACAATCAGGTCATG TCAGCACATGTTGCAGCCAGGGCCAGTGGGAGGGGGGTCTGGGGCCAGTGCACCTTCCAGGG ATTA--AAA-ATATGTG--TA--TG--TTT--TTG-CTTCTTTGAGAATGCAAAGAAAT 4508 4328 4388 3186 4448 3246 3306 4568 4628 3426 4687 3546 4867 3666 4985 5045 3845 3905 5161 3964 5221 5281 3066 3126 3366 3486 3606 4925 3726 3785 4021 ò 8 δý g ò g δ 쉱 ò g qq oy Db QQ Db Qy ò ò ò B Oy g οŽ Db Qy g ò 8 ò 셤 ò g 셤 ò

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                             GGGCTGGGACTTCAGGTCAGCAGAGGAGGAATCCCAGGATCTGCCGGACCCAAGGTGTG
                                            CCCCCTTCATGAGGACTCCCCATACCCCCGGCCCAGAAGAAGAAGGATGCCACAGAGTCTG
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Sequence 9, Application US/07807043B
Patent No. 5342714
GENERAL INFORMATION:
APPLICANT: Boon, Thierry, Van den Eynde, Beno t
TITLE OF INVENTION: Tumor Rejection Antigen Precursors, Tumor TITLE OF INVENTION: Rejection Antigens and Uses Thereof NUMBER OF SEQUENCES: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGACCTTGGAATCCAGATCAGTGTGGACCTCGGCCCTGAGAGGTCCAGGGCACGGTGGCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: MAGE-2 gene
Sequence 4157 BP; 953 A; 1134 C; 1185 G; 885 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                  Diskette, 5.25 inch, 360 kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 1483; DB 4;
Pred. No. 0.00e+00;
                                                                                      BP
                                                                                      STANDARD; DNA; UNC; 4157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: LUD 253.3 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/807,043B
FILING DATE: 19911212
                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 424

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION NUMBER: 07/728,838
FILING DATE: 9-JULY-1991
PRIOR APPLICATION NUMBER: 07/728,838
FILING DATE: 9-JULY-1991
PRIOR APPLICATION NUMBER: 07/705,702
FILING DATE: 23-MBY-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Hanson, No. 5342774man D. REGISTRATION NUMBER: 30,946
  TCTGCTCTGTGGAAGGCCCTGG 4147
                             5401 TCTGCTTTTTGGAAGGCCCTGG 5422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
CITY: New York City
                                                                                                                                                                                                                                                                                                                                                                            OPERATING SYSTEM: PC-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: genomic DNA
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MEDIUM TYPE: Diskett
COMPUTER: IBM
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                                                                                                                                                                                                                                                                                CITY: Ner.
STATE: New Y
                                                                                      US-07-807-043B-9
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TCTCCCAGGAATCAGGAGCTCCAGGAACCAGGCAGTGAG 2170 	-CCTCAGGTCACAGAGGGGGCACGCAGACAGTGCCAAC 2229 	GCACACCAAGGGCCCCACGCC-CAGAACAAATGGGACT 2288 	CTCCCTATTCTCAGTCCTGCAGCTGAGCATGTGCTGGCC 2348	CCCACTICCICCITCAGGITCIGAGGGGACAGGCIGAC 2408 	GAGGAG-CATTGAAGGAGAACTCTGTAAGTAAGCCTTTG 2467 	GITCAGITCICACCIAAGGCCICACACGCICCTICIC 2525 	NATIGCCCAGCICTGCCGCACTCTGCCTGCTGCCCTG 2585	CAGAGTCATCATGCCTCTTGAGCAGGAGTCAGCACTGCAAGCCTGAAGAGGCCTT 2645 	CCGAGGAGGCCCTGGGCCTGGTGCGCGAGGCTCCTGCTACTGAGGAGCAG 2705 	TCCTCTTCTACTCTAGTGGAAGTTACCCTGGGGAAGTGCCTGCTGCC 2765	GACTCACCGAGTCCTCCCCACAGTCCTCAGGAGCCTCCAGCTTCTCGACCTACCATCAAC 2825 	TACACTCTTTGGAGACAATCGGATGAGGGCTCCAGCAACCAAGAAGAGGAGGGGCCAAGA 2885 	TICCGACCTGGAGTCCGAGTICCAAGCAGCAATCAGTAGGAAGATGGTTGAGTTG 2945 	GTTCATTTTCTGCTCCTCAAGTATCGAGCCAGGGAGCCGGTCACAAAGGCAGAAATGCTG 3005 	CAGGACTTCTTCCCGTGATCTTCAGCAAGCCTCCGAG 3065 	GGCATCGAGGTGGTGGTCCCCATCAGCCACTTGTAC 3125 	TTGICACCIGCCTGGGCCTCTCCTACGATGGCCTGCTGGGCGACAATCAGGTCATG 3185
1 CACTGAAGGCCGTGCATTCCTCTCCCAGG 	1 GCCTTGGTCTGAGTCAGTG 	0 ACTGAAGGTTTGCCTGGAAT 	9 CCAGAGGGCCTGGCCTCACC	9 GGCTGTACCCTGAGGTGCCCT 	9 AAGTAGGACCCGAGGCACTG 9 9 CCAGAGGACAGGATTCCCTG	8 TCAGAGCCTCCAAGGTTCAGTT 	6 TCCCAGGCCTGTGGGTCTTCATTGCC	6 AC	6 GAGGC GAGGC	6 CAGACCGCTTCT 9 CTCCTCCTCT	ω ω	9 00	6 ATGT 8 ACCT	y w	6 GAGAGTGTCCTCAGAAATTGCCAGGACTTCTTTCCC 	6 TACTIGCAGCIGGICTIT 	6 ATCC 8 GTCC
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       4448 CCCAAGACAGGCTTCCTGATAATTGTCCTGGTCATGATTGCAATGGAGGGGGCGATGCT
                                    AGTGTCTTCGCACATCCCAGGAAGCTGCTCATGCAAGATCTGGTGCAGGAAAACTACCTG
                                                                  GAGTACCGGCAGGTGCCCGGCAGTGCTGCATGCTACGAGTTCCTGTGGGGTCCAAGG
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Sequence 13, Application US/08299849B.
Sequence 13, Application US/08299849B
Patent No. 5612201
GENERAL INFORMATION:
APPLICANT: De Plaen, Etienne; Boon-Falleur, Thierry;
APPLICANT: Leth, Bernard; Szikora, Jean-Pierre; De Smet, Charles;
APPLICANT: Chomez, Patrick
TITLE OF INVENTION: Isolated Nucleic Acid Molecules Useful In
TITLE OF INVENTION: Determining Expression Of A Tumor Antigen Precurso
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3256 GGATCCAGGCCCTGCCAGGAAAATATAAGGGCCCTGCGTGAGAACAGAGGGGGTCATCC 3315
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MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage COMPUTER: IBM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: MAGE-4 gene
Sequence 2531 BP; 608 A; 593 C; 700 G; 630 T; 0 other;
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Pred. No. 0.00e+00;
0; Mismatches 327;
                                                                                                                                                                                                                                                                                                                                                     APPLICATION DATE:
APPLICATION UNMBER:
PCT/US92/04354
FILING DATE: 22-MAY-1992
RILING DATE: 22-MAY-1992
APPLICATION DATA:
APPLICATION DATA:
APPLICATION UNMBER: 07/764.364
FILING DATE: 23-SEPTEMBER-1991
APPLICATION UNMBER: 07/764.364
FILING DATE: 23-SEPTEMBER-1991
APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION NUMBER: 07/705,702
FILING DATE: 23-MAY-1991
ATTORNEY AGENT INFORMATION:
                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/08/299,849B
FILING DATE: 1-SEPTEMBER-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/037,230
FILING DATE: 26-MARCH-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: LUD 5355
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Hanson, No. 5612201man D. REGISTRATION NUMBER: 30,946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
                                                                                                                    NUMBER OF SEQUENCES: 48
CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
                                                                                                                                                                                                                                       OPERATING SYSTEM: PC-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: genomic DNA
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Best Local Similarity 84.3%;
Matches 2068; Conservative
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New York
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                                                  GGAACAAGGCAGTGAGGCCTTGGTCTGAGACAGTGTCCTCAGGTTACAGAGCAGAGGATG
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CURREN APPLICATION DATA:
PPPLICATION NUMBER: US/08/299,849B
FILING DATE: 1-SEPTEMBER-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/037,230
FILING DATE: 26-MARCH-1993
PRIOR APPLICATION DATA:
FILING DATE: 22-MAY-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Hanson, NO. 5612201man D.
REGISTRATION NUMBER: 30,946
REFERENCE/POCKET NUMBER: LUD 5355
TELECOMUNICATION INFORMATION:
TELEPHONE: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 14:
                                                                                                                                                                                                                                     Sequence 14, Application US/08299849B. Sequence 14, Application US/08299849B Patent No. 5612201 GENERAL INFORMATION:
                                                                                                                                                                                            US-08-299-849B-14 STANDARD; DNA; UNC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICALE 12-DECEMBER PRIOR DATE: 12-DECEMBER APPLICATION DATA:
APPLICATION NUMBER: 07/764,364
APPLICATION NUMBER: 23-SEPTEMBER-1991
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FILING DATE: 22-MAI-1,,,
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/807,043
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: 9-JULY-1991
APPLICATION NUMBER: 9-JULY-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/705,702
FILING DATE: 23-May-1991
                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OPERATING SYSTEM: PC-DOS
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ATTORNEY/AGENT INFORMATION:
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TYPE: nucleic acid
STRANDEDNESS: single
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New York
                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
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1199 GTAATAATCAGATCTTTCCCAAGACAGGCCTTCTGATAATCGTCCTGGGCACAATTGCAA
               AGGAGGAAGAGGGACTCTGAGCATGAGTTGCAGCCAGGGCTGTGGGGAAGGGGCAGGGCT
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                                                                                                                     ATGATGGGAGGGAGCACACTGTCTATGGGGAGCCCAGGAAACTGCTCACCCAAGATTGGG
                                                                                                                                                                                                                                                                                                   TCAGGGTCAATGCAAGAGTTCGCATTGCCTACCCATCCCTGCGTGAAGCAGCTTTGTTAG
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5563 GGGCTCCGGGTGAGAGTGGTGGAGTGTCAATGCCCTGAGCTGGGGCATTTTGGGCTTTGG GGGCTCCAGGTGAGAGTGGTCGGGTGTAAATTCCCTGTG-TGGGGCCTTTTGGGCTTTTGG GAAACTGCATTTTCTTCTGAGGGATCTGATTCTAATGAAGCTTGGTGGGTCC 2428

TITLE OF INVENTION: Isolated Nucleic Acid Molecules Useful In IIILE OF INVENTION: Determining Expression Of A Tumor Antigen Precurso APPLICANT: De Plaen, Etienne; Boon-Falleur, Thierry; APPLICANT: Leth, Bernard; Szikora, Jean-Pierre; De Smet, Charles; APPLICANT: Chomez, Patrick

COMPUTER READABLE FORM: MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage

US-08-190-411A-1.rni

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                                                                        CACAGGCTGTGCCAGCAGTGAATGTTTGCCCTGAATGCACACAAGGGCCCCACCTGCCA
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                                              57;
                                 2531;
                               Score 1399; DB 7; Length 25
Pred. No. 0.00e+00;
0; Mismatches 327; Indels
                     other;
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genomic DNA
            NAME/KEY: MAGE-41 gene
Sequence 2531 BP; 607 A; 593
                               Query Match 24.7%;
Best Local Similarity 84.3%;
Matches 2068; Conservative
MOLECULE TYPE:
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Determining Expression Of A Tumor Antigen Precurso
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                                                                                                                                                                                                                                                                                                                                        Sequence 17, Application US/08299849B.
Sequence 17, Application US/08299849B
Patent No. 561201
GENERAL INFORMATION:
APPLICANT: De Plaen, Etienne; Boon-Falleur, Thierry;
APPLICANT: Leth, Bernard; Szikora, Jean-Pierre; De Smet, Charles;
                                                    5324 GAGAATGTAAGAGAAATTAAATCTGAATAAAGAATTCTTCCTGTTCACTGGCTCTTTTCT
                                                                                   2143 TCTCTATGCACTGAGCATCTGCTCTGTGGAAGGCCCAGGATTAGTAGTGGAGATACTAGG
                                                                                                                  2203 GTAAGCCAGACACACACTACCGATAGGGTATTAAGAGTCTAGGAGC-GCGGTCATATAA
                                                                                                                                                           2262 TTAAGGTGACAAGATGTCCTCTAA-GATGTAGGGGAAAA-GT-A-ACGAGTGTGGGTATG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 10022
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
COMPUTER: IBM
                                                                                                                                                                                                                                                                                                 7T 10
US-08-299-849B-17 STANDARD; DNA; UNC; 2305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 1.SEPTEMBER-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/037,230
FILING DATE: 26-MARCH-1993
PRIOR APPLICATION UNMBER: PCT/US92/04354
FILING DATE: 22-MAY-1992
PRIOR APPLICATION NUMBER: PCT/US92/04354
FILING DATE: 12-MAY-1992
APPLICATION NUMBER: 07/807,043
FILING DATE: 12-DECEMBER-1991
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/299,849B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/728,838
APPLICATION NUMBER: 9-JULY-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 48
CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
CITY: New York City
STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                         Chomez, Patrick
                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: New STATE: New 10022
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Pred. No. 0.00e+00;
0; Mismatches 299; Indels 72;
                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: MAGE-51 gene
Sequence 2305 BP; 549 A; 568 C; 611 G; 577 T; 0 other;
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/705,702
FILING DATE: 23-May-1991
ATTORNEY,AGENT INFORMATION:
NAME: HANSON, NO. 561220lman D.
REGISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 5355
TELECOMMUNICATION INFORMATION:
TELEFHONE: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LENGTH: 2305 base pairs
TYPE: nucleic acid
STRANDENESS: single
                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 21.6%;
Best Local Similarity 84.1%;
Matches 1956; Conservative
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Precurso 2077 5307 2197 2137 5367 5427 2257 APPLICANT: De Plaen, Etienne; Boon-Falleur, Thierry; APPLICANT: Leth, Bernard; Szikora, Jean-Pierre; De Smet, Charles; APPLICANT: Chomez, Patrick TITLE OF INVENTION: Isolated Nucleic Acid Molecules Useful In TITLE OF INVENTION: Determining Expression Of A Tumor Antigen TAGTGGAGATGCTAAGGTAAGCCAGACTCACCCCTACCCCACAGGGTAGTAAGTCTAGGA CACACATAGTGCTGTTTATATAGTTTAGGAGTAAGAGTCTTGTTTTTTTATTCAGATTGGG CACACA--GITCTGTGTATATAGITITAAGGGTAAGAGICTTGTGTTITTAITCAGATIGGG AAATCCATTCCATTTGTGAATTGGGACA-TAGTTACAGCAGTGGAA-TAAGTATTCATT T-AGAAATGTGAA-TGAGC-AGTAAAACTGATGAGATAAAGAAATTAAAAGATATTTAAT TCTIGCCTTATAC -TCAGTCTATTCGGTAAAATTTTTTTTAAAAATGTGCATACCTGGA TTTCCTTGGCTTCTTTGAGAATGTAAGACAAATTAAAATCTGAATAAATCATTCTCCCTGT

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US-08-299-849B-11 STANDARD; DNA; UNC; 1640
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US/08299849B
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Sequence 11, Application
Patent No. 5612201
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                                                                                                                                                                                                                                                                                                         28;
                                                                                                                                                                                                                                                                                     Length 2226;
                                                                                                                                                                                                                                                                                    Score 943; DB 7; Length 222
Pred. No. 0.00e+00;
0; Mismatches 209; Indels
                                                                                                                                                                                                                                                         NAME/KEY: MAGE-5 gene
Sequence 2226 BP: 539 A; 542 C; 582 G; 563 T; 0 other;
                                                       APPLICATION NUMBER: 07/728,838
APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/705,702
FILING DATE: 23-May-1991
ATTORNEY/AGENT INFORMATION:
NAME: Hanson, no. 5612201man D.
REGISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 5355
TELECOMMUNICATION INFORMATION:
                                                                                                                                       LUD 5355
                           APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION DATA:
 07/807,043
         FILING DATE: 12-DECEMBER-1991 PRIOR APPLICATION DATA:
                                                                                                                                                      TELEPHONE: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ 1D NO: 16:
SEQUENCE CHARACTERISTICS:
LENGTH: 2226 base pairs
                                                                                                                                                                                                                                     MOLECULE TYPE: genomic DNA
                                                                                                                                                                                                                                                                                      16.6%;
84.8%;
                                                                                                                                                                                                                  STRANDEDNESS: single
                                                                                                                                                                                                                                                                                     Query Match 16.0%;
Best Local Similarity 84.8%;
Matches 1320; Conservative
APPLICATION NUMBER:
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                                                              GACAGTGATCCCGCACGCTATGAGTTCCTGTGGGGTCCAAGGGCCCTCGCTGAAACCAGC
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          APPLICANT: Leth, Bernard; Szikora, Jean-Pierre; De Smet, Charles; APPLICANT: Chomez, Pattick
TITLE OF INVENTION: Isolated Nucleic Acid Molecules Useful In
TITLE OF INVENTION: Determining Expression of A Tumor Antigen Precurso
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 811; DB 7; Length 1640;
Pred. No. 0.00e+00;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches 248; Indels
Boon-Falleur, Thierry;
                                                                                                                                                             inch, 360 kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: cDNA MAGE-3
Sequence 1640 BP; 380 A; 402 C; 457 G; 401 T; 0 other;
                                                                                                                                                                                                                  UMBER: US/08/299,849B
1-SEPTEMBER-1994
                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: PCT/US92/04354 FILING DATE: 22-MAY-1992 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: LUD 5355
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 07/764,364
FILING DATE: 23 SEPTEMBER-1991
PRIOR APPLICATION DATA: 07/728,838
APPLICATION NUMBER: 07/728,838
APPLICATION NUMBER: 9-JULY-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Hanson, No. 5612201man D. REGISTRATION NUMBER: 30,946
                                                                                                                                                                                                                                                              APPLICATION NUMBER: 08/037,230
FILING DATE: 26-MARCH-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 07/807,043 FILING DATE: 12-DECEMBER-1991 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 07/705,702
FILING DATE: 23-May-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25
 De Plaen, Etienne;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: CDNA to mRNA
                                                                                      SEE: Felfe & Lynch : 805 Third Avenue New York City
                                                                                                                                                                      COMPUTER: IBM
OPERATING SYSTEM: PC-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 1640 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                              SOFTWARE: Wordperfect CURRENT APPLICATION DATA:
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Best Local Similarity 81.7%;
Matches 1257; Conservative
                                                                   NUMBER OF SEQUENCES: 48
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                        ADDRESSEE: Felfe
STREET: 805 Third
CITY: New York Ci
STATE: New York
ZIP: 10022
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 APPLICANT:
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 TITCCTACCCACCCCTGCATGAGTGGGTTTTGAGAGAGGGGGAAGAGTCTGAGCAC
                 AGCTGGTCTTTGGCATCGAGCTGATGGAAGTGGACCCCATCGGCCACTTGTACATCTTTG
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                                                            CAGATCCTCCCCAGAGTCCTCAGGGAGCCTCCAGCCTCCCCACTACCATGAACTACCCTC
                                                                                                                        407 TCTGGAGCCAATCCTATGAGGACTCCAGCAACCAAGAGGAGGGGGCCAAGCACCTTCC
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          GTGGAATAAGTACTTAGA-AATGTGAAAATGAGCAGTAAAATAGATGAGATAAAGAACT
                                         TGTTTTTTACTCAAATTGGGAAATCCATTTCCATTTTGTGAATTGTGACATAATAATAGCA
                                                                                                                                                                                                                                                            Sequence 11, Application US/07807043B.
Sequence 11, Application US/07807043B
Patent No. 3342774
GENERAL INFORMATION:
APPLICANT: Boon, Thierry, Van den Eynde, Beno t
TITLE OF INVENTION: Rejection Antigen Precursors, TITLE OF INVENTION: Rejection Antigens and Uses Thereof CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                         Diskette, 5.25 inch, 360 kb storage
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US-07-807-043B-11 STANDARD; DNA; UNC; 1640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE TOOKET NUMBER: LUD 253.3
TELECOMMUNICATION INFORMATION:
TELEFAN: (212) 688-9200
TELEFAN: (212) 838-3884
INFORMATION FOR SEQ ID NO: 11:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/807,043B
FILING DATE: 19911212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: 07/705,702
FILING DATE: 23-May-1991
ATTORNEY, AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Hanson, No. 5342774man D. REGISTRATION NUMBER: 30,946
                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
CITY: New York City
STATE: New York
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MOLECULE TYPE: cDNA to mRNA
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CLASSIFICATION:
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                                  Length 1640;
                                                                  Indels
Sequence 1640 BP; 380 A; 402 C; 457 G; 401 T; 0 other;
                               Score 811; DB 4; Lei
Pred. No. 0.00e+00;
0; Mismatches 248;
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larity 81.7%;
Conservative
                                                Best Local Similarity
Matches 1257; Conser
                                  Query Match
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                                                                                   TCAGCATTCTTAGTAGTGGGTTTCTGTTCTGTTGGATGACTTTGAGATTATTCTTTGTTT
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TITLE OF INVENTION: Tumor Rejection Antigen Precursors,
TITLE OF INVENTION: Rejection Antigens and Uses Thereof
NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
CITY: New York City
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MEDIUM TYPE: Diskette, 5.25 inch, 360 kb
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US-07-807-043B-13 STANDARD; DNA; UNC; 1067
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/807,043B
FILING DATE: 19911212
                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 13, Application US/07807043B. Sequence 13, Application US/07807043B Patent No. 5342774
GENERAL INFORMATION:
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APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION DATA:
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OPERATING SYSTEM: PC-DOS
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STATE: New 10022
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Pred. No. 0.00e+00;
0; Mismatches 153; Indels 11;
                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1067 BP; 258 A; 222 C; 301 G; 286 T; 0 other;
FILING DATE: 23-May-1991
ATTORNEY/AGENT INFORMATION:
NAME: Hanson, No. 5342774man D.
REGISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 253.
TELEPHONE: (212) 688-200
TELEPHONE: (212) 688-3884
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 1067 base pairs
TYPE: NUCLEIC ACID

"TYPE: NUCLEIC ACID

"TYPE: AUGUSTICS OF THE ACID
                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: CDNA to mRNA
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Local Similarity 84.6%;
Les 901; Conservative
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NAME/KEY:
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                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Isolated Nucleic Acid Molecules Useful In TITLE OF INVENTION: Determining Expression Of A Tumor Antigen Precurso
                                                                                                                                                            5032 IGAAIGAACTICAGCAICCAAGIITAIGAAIGACAGCAGICCACACAGTICIGIGAIATA 5091
4858 -CTTCCAGG-GCCGCGTCCAGCAGCTTCCCCTGCCTCGTGTGACATGAGGCCCATTCTTC 4915
                                                                               Sequence 15, Application US/08299849B.
Sequence 15, Application US/08299849B
Sequence 15, Application US/08299849B
Patent No. 5612201
GENERAL INFORMATION:
APPLICAMT: De Plaen, Etienne; Boon-Falleur, Thierry;
APPLICAMT: Leth , Bernard; Szikora, Jean-Pierre; De Smet, Charles;
APPLICANT: Chomez, Patrick
                                                                                                                TGAATTAACTTCAGCATCCAAGTTTATGAATCGTAGTTAACGTATATTGCTGTTAATATA 959
                      781 ACTCTGTTTGAAGAAAATAGTCAGTGTTCTTAGTAGTGGGTTTCTATTTTGTTGGATGAC
                                4916 ACICIG----AAGAGGGGGTCAGTGTTCTCAGTAGTAGGTTTCTGTTCTATTGGGTGAC
                                                                    841 TTGGAGATTTATCTCTGTTTCCTTTTACAATTGTTGAAATGTTCCTTTT-AATGGATGGT
                                                                                                                                                                                                                        1020 TTGGGACATAATAACAGCAGTGGAGTAAGTATTTAGAAGTGTGAA 1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           inch, 360 kb storage
                                                                                                                                                                                                                                                                              BP
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US-08-299-849B-15 STANDARD; DNA; UNC; 1068
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APPLICATION NUMBER: 08/037,230
FILING DATE: 26-MARCH-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/04354
FILING DATE: 22-MAY-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM: PC-DOS
SOFTWARE: Wordperfect
CURRENT APPLICATION DATA.
APPLICATION NUMBER: US/08/299,849B
FILING DATE: 1-SEPTEMBER-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CALTE: New YOLN
STATE: NOUZ
ZIP: 10022
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 in
""""FR: IBM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 07/807,043 FILING DATE: 12-DECEMBER-1991 PRIOR APPLICATION DATA: APPLICATION NUMBER: 07/764,364 FILING DATE: 23-SEPTEMBER-1991 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hanson, No. 5612201man D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 07/728,838 APPLICATION NUMBER: 9-JULY-199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 07/705,702 FILING DATE: 23-May-1991 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
CITY: New York City
STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 48
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CLASSIFICATION: 435
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 GGATGAGTTGGCTCCATTTTCTGCTCCGCAAGTATCGAGCCCAAGGAGCTGGTCACAAAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4198 GGCTGATTTGGTTGGTTTTCTGCTCCTCAAATATCGAGCCAGGGAGCCAGTCACAAAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 AGAAATGCTGGAGAGAGTCATCAAAAATTACAAGCGCTGCTTTCCTGTGATCTTCGGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661 AGAGGGAGTCTGAGCATGAGTTGCAGCCAGGGCTGTGGGGGAAGGGGCCAGGGCTGGGCCAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481 AAACTACCTGGAGTACCGGCAGGTACCCGGCAGTAATCCTGCGCGCTATGAGTTCCTGTG
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                                                                                                                                                                                                                                                                                                                   Score 683; DB 7; Length 1068;
Pred. No. 0.00e+00;
0; Mismatches 153; Indels 11;
                                                                                                                                                                                                                                                               NAME/KEY: cDNA MAGE-4
Sequence 1068 BP; 258 A; 222 C; 302 G; 286 T; 0 other;
                    5355
              REFERENCE/DOCKET NUMBER: LUD 53
TELECOMMUNICATION INFORMATION:
TELEFAX: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERIFICS:
LENGTH: 1068 base pairs
TYPE: nucleic acid
TYPE: nucleic acid
STRANDEDNESS: single
REGISTRATION NUMBER: 30,946
                                                                                                                                                                                                 TOPOLOGY: linear MOLECULE TYPE: cDNA to mRNA
                                                                                                                                                                                                                                                                                                                           12.0%;
                                                                                                                                                                                                                                                                                                                                          Best_Local Similarity 84.6%;
Matches 902; Conservative
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0	497	Qy 4915 CACTCTGAAGAGAGCGGTCAGTGTTCTCAGTAGGTTTCTGTTCTATTGGGTGA 4970	οy

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	4971 CTTGGAGATTTATCTTTGTTCTTTTGGAATTGTTCAAATGTTTTTTTT	900 TIGAATTAACTICCAGCAICCAAGTITAIGAATCGIAGTIAACGIAIATIGCIGITAAIAI 959	5031
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Search completed: Tue Apr 7 20:56:43 1998 Job time: 316 secs.

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Sequence 1, Application Sequence 15, Application Sequence 12, Application Sequence 12, Application Sequence 12, Application Sequence 24, Application Sequence 16, Application Sequence 16, Application Sequence 17, Application Sequence 19, Application Sequence 10, Applicati

US-08-403-US-07-807-US-08-299-US-08-299-US-08-299-US-08-299-US-08-299-US-08-299-US-08-299-US-08-239-US-08-232-US-08-232-US-08-232-US-08-238-US-08-

20 184 22.1 1866 21 149 17.9 225 22 149 17.9 225 23 141 17.0 943 24 141 17.0 943 25 136 16.4 2150 26 135 16.2 2099 27 102 12.3 920 28 93 11.2 166 29 87 10.5 687 30 62 7.5 461 23 53 62 7.0 7218	22 23 24 4. 7. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	38 27 3.2 41 24 42 2.9 3.2 2.9 3.2 2.9 3.2 2.9 3.2 2.9 3.3 2.9 3.3 2.9 3.3 3.2 3.3 3.2 3.3 3.3 3.3 3.3 3.3 3.3	23.3 23.3 23.3 23.3 23.3 23.3 23.3 23.3	75	DT 01-JAN-1900 DE Sequence 7, Application CC Sequence 7. Application		CC APPLICANT: De VIDEN. CC APPLICANT: Leth, Be CC APPLICANT: Chomez, F CC TITLE OF INVENTION:	4.	CC CORRESPONDENCE ADDRES CC ADDRESSEE: Felfe & CC STREET: 805 Third CC CITY: New York Cit	8	C COMPUTER: 1EM CC OPERATING SYSTEM: CC SOFTWARE: WORDGOET CC CURRENT APPLICATION L CC APPLICATION NUMBER: CC FILING DATE: 1-SEE		CC FILING DATE: 22-WA CC PRIOR APPLICATION DAT CC APPLICATION UNBER: CC FILING DATE: 12-DE CC PRIOR APPLICATION DAT CC APPLICATION UNBER: CC PRIOR APPLICATION UNBER: CC FILING DATE: 23-SE CC PRIOR APPLICATION DAT
	Release 2.1D John F. Collins, Biocomputing Research Unit. Copyright (c) 1993, 1994, 1995 University of Edinburgh, U.K. Distribution rights by IntelliGenetics, Inc. MPsrch_nn n.a n.a. database search, using Smith-Waterman algorithm	: r output no	tion: (3931-0850x	SCOLING CADIE: IABLE GELGUIL Gap 6	ed: 96465 seqs, 2510	Post-processing: Minimum Match 0% Listing first 45 summaries	Database: n-issued 1:back1 2:51 3:52 4:53 5:54 6:55 7:56 8:57 9:PCT90 10:PCT91 11:PCT92 12:PCT93 13:PCT94 14:PCT95 15:PCT96	Statistics: Mean 8.492; Variance 4.464; scale 1.902	Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.	Result Query No. Score Match Length DB ID Description Pred. No.	831 100.0 2419 7 US-08-299- Sequence 7, Applicatio 831 100.0 2419 4 US-07-807- Sequence 7, Applicatio 831 100.0 5674 4 US-07-807- Sequence 8, Applicatio 831 100.0 5674 6 US-08-190- Sequence 1, Applicatio 571 6 US-08-190- Sequence 8, Applicatio 671 7 US-08-190- 67	582 70.0 2531 7 05-08-299- Sequence 13, Application 513 61.7 2305 7 05-08-299- Sequence 17, Application 502 60.4 1640 4 05-07-807- Sequence 11, Application 502 60.4 1640 7 05-08-299- Sequence 11, Application 502 60.2 2226 7 05-08-299- Sequence 16, Application 60.2 2226 7 05-08-299- Sequence 16, Application 500 600 600 600 600 600 600 600 600 600	4157 7 US-08-299- Sequence 9, 4157 4 US-07-807- Sequence 9, 1810 7 US-08-299- Sequence 20, 1068 7 US-08-299- Sequence 15, 1067 4 US-07-807- Sequence 15, 1947 7 US-08-299- Sequence 13, 1412 7 US-08-299- Sequence 21, 1107 7 US-08-299- Sequence 21,

ALIGNMENTS

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n, Etienne; Boon-Falleur, Thierry;
Bernard; Szikora, Jean-Pierre; De Smet, Charles;
Patrick
Isolated Nucleic Acid Molecules Useful In
Determining Expression Of A Tumor Antigen Precurso
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kette, 5.25 inch, 360 kb storage
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CLASSIFCATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/037,230
FILING DATE: 26-MARCH-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/04354
FILING DATE: 22-MAY-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/807,043
FILING DATE: 12-DECEMBER-1991
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                STEM: PC-DOS
Ordperfect
ATION DATA:
NUMBER: US/08/299,849B
1-SEPIEMBER-1994
RD; DNA; UNC; 2419
                                                n US/08299849B.
n US/08299849B
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d Avenue
ity
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GATCCCGCACGCTATGAGTTCCTGTGGGGTCCAAGGGCCCTCGCTGAAACCAGCTATGTG 1455
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OPERATING SYSTEM: PC-DOS
SOFTWARE: Wordperfect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS: singular
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Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               831; Conservative
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Pred. No. 0.00e+00;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear MOLECULE TYPE: genomic DNA Sequence 2419 BP; 562 A; 581 C; 677 G; 599 T; 0 other;
                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: LUD 5355
TELECOMUNICATION INFORMATION:
TELEFAX: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 2419 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/705,702
FILING DATE: 23-May-1991
ATTORNEY,AGENT INFORMATION:
NAME: Hanson, No. 5612201man D.
REGISTRATION NUMBER: 30,946
APPLICATION NUMBER: 07/728,838 APPLICATION NUMBER: 9-JULY-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 831; Conservative
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4651 GATCCCGCACGCTATGAGTTCCTGTGGGGTCCAAGGGCCCTCGCTGAAACCAGCTATGTG 4710
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                                                                                                                                                                                                                                                                                                                      Sequence 7, Application US/07807043B.

Sequence 7, Application US/07807043B

Sequence 7, Application US/07807043B

Sequence 7, Application US/07807043B

Sequence 7, Application US/07807043B

CENTILL OF INVENTION: Thierry, Van den Eynde, Beno to TITLE OF INVENTION: Rejection Antigen Precursors, Tum TITLE OF INVENTION: Rejection Antigen Precursors, Tum TITLE OF INVENTION: Rejection Antigen SThereof CORRESPONDENCE ADDRESSEE: Felfe & Lynch STREET: 805 Third Avenue

CENTRE New York City

CENTRE 10022
                                                                                 1456 AAAGTCCTTGAGTATGTGATCAAGGTCAGTGCAAGAGTTCGCTTTTTCTTC 1506
                                                                                                           Length 2419;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: genomic DNA
Sequence 2419 BP; 562 A; 581 C; 677 G; 599 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 831; DB 4; 1 Pred. No. 0.00e+00;
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US-07-807-043B-7 STANDARD; DNA; UNC; 2419
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/807,043B
FILING DATE: 19911212
CLASSIFICATION: 424
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APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/728,838
FILING DATE: 9-JULY-1991
PRIOR APPLICATION NUMBER: 07/705,702
FILING DATE: 23-MAY-1991
ATORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Hanson, No. 5342774man D. REGISTRATION NUMBER: 30,946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 2419 base pairs
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                                                  TGAGGGTTCCAGCAGCCGTGAAGAGGAGGGCCCAAGCACCTCTTGTATCCTGGAGTCCTT 4170
                                                                                                                                        GCACTGTTTTCCTGAGATCTTCGGCAAAGCCTCTGAGTCCTTGCAGCTGGTCTTTGGCAT 1095
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TCCTCAGGGAGCCTCCGCCTTTCCCACTACCAACTTCACTCGACAGAGGCAACCCAG
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                                  TGAGGGTTCCAGCAGCCGTGAAGAGGAGGGGCCAAGCACCTCTTGTATCCTGGAGTCCTT
                                                                     GTTCCGAGCAGTAATCACTAAGAAGGTGGCTGATTTGGTTTGGTTTTCTGCTCCTCAAATA
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                                         Sequence 8, Application US/07807043B.
Sequence 8, Application US/07807043B
Patent No. 3342774
GENERAL INFORMATION:
APPLICANT: Boon, Thierry, Van den Eynde, Beno t
TITLE OF INVENTION: Rejection Antigen Precursors,
TITLE OF INVENTION: Rejection Antigens and Uses Thereof
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        storage
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MEDIUM TYPE: Diskette, 5.25
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STREET: 805 Third Avenue
CITY: New York City
STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OPERATING SYSTEM: PC-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Wordperfect CURRENT APPLICATION DATA:
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Sequence 5674 BP; 1276 A; 1644 C; 1569 G; 1185 T; 0 other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                             NAME: Hanson, No. 5342774man D.
REGISTRATION NUMBER: 30,946
REFRENCE/DOCKET NUMBER: LUD 253.3
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 688-9200
TELEPHONE: (212) 838 3884
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 5574 base pairs
US/07/807,043B
                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/705,702
FILING DATE: 23-May-1991
ATTORNEY/AGENT INFORMATION:
                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPFEMBER-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/728,838
FILING DATE: 9-JULY-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: NUCLEIC ACID
STRANDEDNESS: singular
                 19911212
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Best Local Similarity 100.0%;
Matches 831; Conservative
APPLICATION NUMBER:
FILING DATE: 19911;
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                                        CLASSIFICATION:
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FEATURE
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Sequence 1, Application US/08190411A
Sequence 1, Application US/08190411A
Sequence 1, Application
Sequence 1, Application
GENERAL INFORMATION:
APPLICANT: Chen, Yao-Tseng; Stockert, Elisabeth;
APPLICANT: Chen, Yachi; Garin-Chesa, Pilar; Rettig, Wolfgang J.;
APPLICANT: van der Bruggen, Pierre; Boon-Falleur, Thierry;
APPLICANT: Old, Lloyd J.
TITLE OF INVENTION: TUMOR REJECTION ANTIGEN PRECURSOR MAGE-1, REG
                                         4651 GATCCCGCACGCTATGAGTTCCTGTGGGGTCCAAGGGCCCTCGCTGAAACCAGCTATGTG
                                                                                                                                                                                                                4651 GATCCCCCACGCTATGAGTTCCTGTGGGGTCCAAGGGCCCTCGCTGAAACCAGCTATGTG
                     GCTGAGTGTGATGGAGGTGTATGATGGGAGGGAGCACAGTGCCTATGGGGAGCCCAGGAA
                                                                                                       GCTGCTCACCCAAGATTTGGTGCAGGAAAGTACCTGGAGTACGCCAGGTGCCGGACAGT
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TITLE OF INVENTION: AND MAGE-1 DERIVED IMMUNOGENIC PEPTIDES
                                                                                                                                                                                                                                                                           4711 AAAGTCCTTGAGTATGTGATCAAGGTCAGTGCAAGAGTTCGCTTTTTCTTC 4761
                                                                                                                                                                                                                                                                                             4711 AAAGTCCTTGAGTATGTGATCAAGGTCAGTGCAAGAGTTCGCTTTTTCTTC 4761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM
COMPUTER: IBM
SYSTEM: PC-DOS
SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/190,411A
FILING DATE: 01-FEBRUARY-1994
CLASSIFTCATION DATA:
PRIOR APPLICATION DATA:
FILING DATE: 26-MARCH-1993
PRIOR APPLICATION DATA:
FILING DATE: 22-MAY-1992
PRIOR APPLICATION DATA:
FILING DATE: 12-DECEMBER-1991
PRIOR APPLICATION DATA:
PARTICATION DATA:
PARTI
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APPLICATION NUMBER: 07/705,702
FILING DATE: 23-MAY-1991
ATTORNEY/AGENT INFORMATION:
NAME: Hanson, No. 5541104man D.
REGISTATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 5354
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                  US-08-190-411A-1 STANDARD; DNA; UNC; 5674
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FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION DATA: 07/728,838
APPLICATION NUMBER: 9-JULY-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
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STATE: New .
TO: 10022
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4291 GCACTGTTTTCCTGAGATCTTCGGCAAAGCCTCTGAGTCCTTGCAGCTGGTCTTTGGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4351 TGACGTGAAGGAAGCAGACCCCACCGGCCACTCCTATGTCCTTGTCACCTGCCTAGGTCT
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                                                                                                                                                                                                                                                                                                           Length 5674;
                                                                                                                                                                                                                                  NAME/KEY: MAGE-1 gene
Sequence 5674 BP; 1276 A; 1644 C; 1569 G; 1185 T; 0 other;
                                                                                                                                                                                                                                                                                                      Match 100.0%; Score 831; DB 6; Length 567 Local Similarity 100.0%; Pred. No. 0.00e+00; les 831; Conservative 0; Mismatches 0; Indels
TELEPHONE: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 5674 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                               TOPOLOGY: linear
MOLECULE TYPE: genomic DNA
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Thu Apr

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4111 TGAGGGTTCCAGCAGCCGTGAAGAGGAGGGGCCAAGCACCTCTTGTATCCTGGAGTCCTT 4170
3931 GGCCCAACAAGAGGCCCTGGGCCTGGTGTGTGTGCAGGCTGCCACCTCCTCCTCTCTCC 3990
                                                                                                                                                                                                                                           TCGAGCCAGGGAGCCAGTCACAAAGGCAGAAATGCTGGAGAGTGTCATCAAAAATTACAA
                                                                                                                                                                                                                                                                                4291 GCACTGTTTTCCTGAGATCTTCGGCAAAGCCTCTGAGTCCTTGCAGCTGGTCTTTGGCAT
                                                                                                                                                                                                                                                                                             GCACTGTTTTCCTGAGATCTTCGGCAAAGCCTCTGAGTCCTTGCAGCTGGTCTTTGGCAT
                                                                                                                                                                                                                                                                                                                                               CTCCTATGATGGCCTGCTGGGTGATAATCAGATCATGCCCAAGACAGGCTTCCTGATAAT
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                                                                                                                                                   TITLE OF INVENTION: Isolated Nucleic Acid Molecules Useful In
TITLE OF INVENTION: Determining Expression Of A Tumor Antigen Precurso
                                                            Sequence 8, Application US/08299849B.
Sequence 8, Application US/08299849B
Patent No. 561201
GENERAL INFORMATION:
APPLICANT: De Plaen, Etienne; Boon-Falleur, Thierry;
APPLICANT: Leth, Bernard; Szikora, Jean-Pierre; De Smet, Charles;
APPLICANT: Chômez, Patrick
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 831; DB 7; Length 5674; 100.0%; Pred. No. 0.00e+00; vative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: MAGE-1 gene
Sequence 5674 BP; 1276 A; 1644 C; 1569 G; 1185 T; 0 other;
                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
COMPUTER: IBM
                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/299,849B
FILING DATE: 1-SEPTEMBER-1994
CLASSIFICATION 0435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/037,230
FILING DATE: 26-MARCH-1993
PRIOR APPLICATION DATA:
                       US-08-299-849B-8 STANDARD; DNA; UNC; 5674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 07/728,838
APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION NUMBER: 9-JULY-1991
APPLICATION NUMBER: 07/705,702
FILING DATE: 23-May-1991
ATTORNEY/AGENT INFORMATION:
NAME: Hanson, No. 561220lman D.
REGISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 5355
TELECHONICATION INFORMATION:
TELECHONICATION FOR SEQ ID NO: 8:
                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: PCT/US92/04354
FILING DATE: 22-MAY-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/807,043
FILING DATE: 12-DECEMBER-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 12-DECEMBER-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION DATA:
                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
                                                                                                                                                                                                                                                                                                                    OPERATING SYSTEM: PC-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 5674 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                  Wordperfect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100.0%;
                                                                                                                                                                                                                                        CITY: New York City
STATE: New York
ZIP: 10022
                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
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                                                01-JAN-1900
              RESULT
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Isolated Nucleic Acid Molecules Useful In Determining Expression Of A Tumor Antigen Precurso Sequence 14, Application US/08299849B.
Sequence 14, Application US/08299849B
Patent No. 561201
GENERAL INFORMATION:
APPLICANT: De Plaen, Etienne: Boon-Falleur, Thierry;
APPLICANT: Leth , Bernard; Szikora, Jean-Pierre; De Smet, Charles;
APPLICANT: Chomez, Patrick US-08-299-849B-14 STANDARD; DNA; UNC; 2531 NUMBER OF SEQUENCES: 48
CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue TITLE OF INVENTION: TITLE OF INVENTION:

3931 GGCCCAACAAGAGGCCCTGGGCCTGGTGTGTGTGCAGGCTGCCACCTCCTCCTCCTCTCC 3990

Matches 831; Conservative

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Gaps

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4266 TGGAGAGTGTCATCAAAAATTACAAGCACTGTTTTCCTGAGATCTTCGGCAAAGCCTCTG 4325
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MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-299-849B-13 STANDARD; DNA; UNC; 2531 BP
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/299,849B
FILING DATE: 1-SEPTEMBER-1994
CLASSIFICATION DATA:
APPLICATION NUMBER: 08/037,230
FILING DATE: 26-MARCH-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/04354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-JAN-1900
Sequence 13, Application US/08299849B.
Sequence 13, Application US/08299849B
Patent No. 5612201
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 48
CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
CITY: New York
STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM
OPERATING SYSTEM: PC-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 22-MAY-PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                974 TGGCTCATTTTCTGCTCCGCAAGTATCGAGCCAAGGAGCTGGTCACAAAGGCAGAAATGC 1033
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 914 GCACCTCGCCTGACGCAGAGTCCTTGTTCCGAGAAGCACTCAGTAACAAGGTGGATGAGT
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                                                                          Diskette, 5.25 inch, 360 kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 2531 BP; 607 A; 593 C; 701 G; 630 T; 0 other;
                                                                                                                                                                                               CLASSIFICATION DATA:

APPLICATION NUMBER: 08/037,230
FILING DATE: 26-MARCH-1993
PRIOR APPLICATION NUMBER: PCT/US92/04354
FILING DATE: 22-MAY-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/04354
FILING DATE: 12-DECEMBER-1991
PRIOR APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION NUMBER: 30,946
FILING DATE: 23-MAY-1991
ATTORNEY/AGENT INFORMATION:
NAME: HADSON, NO. 5612201man D. REGISSPRATION NUMBER: 30,946
TELECHOMMUICATION INFORMATION:
TELEPHONE: (212) 688-9200
TELEFAX: (212) 688-9205
                                                                                                                    SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/299,849B
FILING DATE: 1-SEPTEMBER-1994
CLASSIFICATION: 435
                                                                                                          OPERATING SYSTEM: PC-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MAGE-41 gene
                                        ZIP: 10022
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
          New York City
New York
                                                                                          IBM
CITY: Ne. STATE: New Y 10022
                                                                                            COMPUTER:
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Isolated Nucleic Acid Molecules Useful In
Determining Expression Of A Tumor Antigen Precurso
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APPLICANT: Leth, Bernard; Szikora, Jean-Pierre; De Smet, Charles;
APPLICANT: Chomez, Patrick
TITLE OF INVENTION: Determining Expression Of A Tumor Antigen Prec
                                                                                                                                                                                                                                                                                                                                                                                                                                        1334 ACACTGTCTATGGGGAGCCCAGGAAACTGCTCACCCAAGATTGGGTGCAGGAAACTACC 1393
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AGTCCCTGAAGATGATCTTTGGCATTGACGTGAAGGAAGTGGACCCCACCAGCAACACCT
                                                                                                                                                                                                                                                                                                                               4326 AGTCCTTGCAGCTGGTCTTTGGCATTGACGTGAAGGAAGCAGACCCCACCGGCCACTCCT
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GENERAL INFORMATION:
APPLICANT: De Plaen, Etienne; Boon-Falleur, Thierry;
APPLICANT: Leth, Bernard; Szikora, Jean-Pierre; De Smet, Charles;
APPLICANT: Chomez, Patrick
TILLE OF INVENTION: Isolated Nucleic Acid Molecules Useful In
TITLE OF INVENTION: Determining Expression Of A Tumor Antigen Precurso
       1334 ACACTGTCTATGGGGAGCCCAGGAACTGCTCACCAAGATTGGGTGCAGGAAAACTACC 1393
                                                  4566 ACAGTGCCTATGGGGAGCCCAGGAAGCTGCTCACCCAAGATTTGGTGCAGGAAAAGTACC
                                                                                                                                                               1394 TGGAGTACCGGCAGGTACCCGGCAGTAATCCTGCGCGCTATGAGTTCCTGTGGGGTCCAA
                                                                                                                                                                                                   4626 TGGAGTAC-GGCAGGTGCCGGACAGTGATCCCTGTGGGGTCCAA
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CURENT AFFLICATION NUMBER:

FILING DATE: 1-SEPTEMBER-1994

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/037,230

FILING DATE: 26-MARCH-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/US92/04354

FILING APPLICATION DATA:

APPLICATION NUMBER: 07/807,043

FILING DATE: 12-DECRHBER-1991

PRIOR APPLICATION NUMBER: 07/84,364

FILING DATE: 12-DECRHBER-1991

PRIOR APPLICATION NUMBER: 07/84,364

FILING DATE: 23-SEPTEMBER-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JP 8
US-08-299-849B-17 STANDARD; DNA; UNC; 2305
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TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JAN-1900
Sequence 17, Application US/08299849B.
Sequence 17, Application US/08299849B
Patent No. 5612201
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APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/705,702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY AGENT INFORMATION:
NAME: Hanson, No. 5612201man D.
REGISTRATION NUMBER: 30,946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.2
COMPUTER: IBM
OPERATING SYSTEM: PC-DOS
SOFTWARE: Wordperfect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO: 17:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (212) 688-9200
(212) 838-3884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 48
CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: Wordperfect CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New York City
New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1514 GAGTTCGCATT 1524
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 582; DB 7; Length 253
Pred. No. 0.00e+00;
0; Mismatches 101; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: MAGE-4 gene
Sequence 2531 BP; 608 A; 593 C; 700 G; 630 T; 0 other;
                                                                                                                                                                               PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/728,838
APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION NUMBER: 9-JULY-1991
ATTORNEY/AGENT INFORMATION:
NAME: HANSON, NO. 5612201man D.
REGISTRATION NUMBER: 100 5355
TELEPHONE: (212) 688-9200
TELEPHONE: (212) 688-9200
TELEPRX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 2531 base pairs
APPLICATION NUMBER: 07/807,043 FILING DATE: 12-DECEMBER-1991 PRIOR APPLICATION DATA: APPLICATION NUMBER: 07/764,364 FILING DATE: 23-SEPTEMBER-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nucleic acid
SDNESS: single
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Matches 689; Conservative
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Patent No. 5342774
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                                                                                                                            GCAGGAGGCTGTGTCCTCCTCCTCTCTCTGGTCCCAGGCACCCTGGGGGAGGTGCCTGC 807
                                                                                                          Gaps
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                                                                                                          0; Mismatches 96; Indels
                                                              NAME/KEY: MAGE-51 gene
Sequence 2305 BP; 549 A; 568 C; 611 G; 577 T; 0 other;
                                                                                         Score 513; DB 7;
Pred. No. 0.00e+00;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .r. 9
US-07-807-043B-11 STANDARD; DNA; UNC; 1640
                         STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: genomic DNA
        LENGTH: 2305 base pairs
TYPE: nucleic acid
 SEQUENCE CHARACTERISTICS
                                                                                        Match 61.7%;
Local Similarity 86.4%;
es 633; Conservative
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Sequence 11, Application US/07807043B Sequence 11, Application US/07807043B

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                   APPLICANT: Boon, Thierry, Van den Eynde, Beno t
TITLE OF INVENTION: Tumor Rejection Antigen Precursors,
TITLE OF INVENTION: Rejection Antigens and Uses Thereof
NUMBER OF SEQUENCES: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1640;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 60.4%; Score 502; DB 4; Length 164
Best Local Similarity 81.8%; Pred. No. 0.00e+00;
Matches 652; Conservative 0; Mismatches 144; Indels
                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
CITY: New York City
STATE: New York
STATE: New York
COMPUTE: NEW YOR
COMPUTE: FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: CDNA MAGE-3
Sequence 1640 BP; 380 A; 402 C; 457 G; 401 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Hanson, No. 5342774man D. REGISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 253.3
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 11:
                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/807,043B
FILING DATE: 19911212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPFEMBER-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/728,838
FILING DATE: 9-JULY-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/705,702
FILING DATE: 23-MAY-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: linear MOLECULE TYPE: CDNA to mRNA
                                                                                                                                                                                                                                                                                                                                                                        OPERATING SYSTEM: PC-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 1640 base pairs
TYPE: NUCLEIC ACID
STRANDEDNESS: singular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                       IBM
                                                                                                                                                                                                                                                                                                                                                       COMPUTER:
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4504 TGCTCCTGAGGAGGAAATCTGGGAGGAGGTGTGATGATGAGGGTGTATGATGAGGGGA 4563
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 502; DB 7; Length 1640; Pred. No. 0.00e+00;
                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches 144; Indels
                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: cDNA MAGE-3
Sequence 1640 BP; 380 A; 402 C; 457 G; 401 T; 0 other;
                                                                                                                                                          NAME: Hanson, No. 5612201man D.
REGISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 5355
TELECOMMUNICATION INFORMATION:
TELEPRAN: (212) 888-9200
TELEPRAN: (212) 838-3884
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/728,838
APPLICATION NUMBER: 9-JULY-1991
APPLICATION NUMBER: 07/807,043
FILING DATE: 12-DECEMBER-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/705,702
FILING DATE: 23-May-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: CDNA to mRNA
                                                                                                                                                                                                                                                                      LENGTH: 1640 base pairs
                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 60.4%;
Best Local Similarity 81.8%;
Matches 652; Conservative
                                                                                                                                                                                                                                                                                   TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                linear
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Sequence 11, Application US/08299849B
Sequence 11, Application US/08299849B
Pattent No. 561201
GENERAL INFORMATION:
APPLICANT: De Plaen, Etienne; Boon-Falleur, Thierry;
APPLICANT: Chomez, Patrick
APPLICANT: Chomez, Patrick
TILLE OF INVENTION: Isolated Nucleic Acid Molecules Useful In
TILLE OF INVENTION: Determining Expression Of A Tumor Antigen Precurso
  4264 GCTGGAGAGTGTCATCAAAATTACAAGCACTGTTTTCCTGAGATCTTCGGCAAAGCCTC 4323
                                                                                                           4683 AAGGGCCCTCGCTGAAACCAGCTATGTGAAAAGTCCTTGAGTATGTGATATGAGTCAGTGC 4742
                                                                  4324 TGAGICCTIGCAGCIGGICITIGGCATIGACGIGAAGGAAGCAGACCCCACCGGCCACIC 4383
                                                                                                                                                                                                                                                                         AAGGGCCCTCGTTGAAACCAGCTATGTGAAAGTCCTGCACCATATGGTAAAGATCAGTGG 1055
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                                                                                             GTACATCTTTGCCACCTGCCTGGGCCTCTCTACGATGGCCTGCTGGGTGACAATCAGAT 755
                                                                                                                                                  CATGCCCAAGGCAGGCCTCCTGATAATCGTCCTGGCCATAATCGCAAGAGAGGGGCGACTG
                                                                                                                                                                                                     876 AGACAGTATGTTGGGGGATCCCAAGAAGCTGCTCACCCAACATTTCGTGCAGGAAAACTA
                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
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US-08-299-849B-11 STANDARD; DNA; UNC; 1640 BP.
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SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/299,849B
FILING DATE: 1-SEPTEMBER-1994
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PROR APPLICATION DATA:
APPLICATION NUMBER: 08/037,230
FILING DATE: 26-MARCH-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 48
CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
CITY: New York City
STATE: New York
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SEQUENCE CHARACTERISTICS:
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TOPOLOGY: lir
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01-JAN-1900
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Sequence 16, Application US/0829849B.
Sequence 16, Application US/08299849B
Sequence 16, Application US/08299849B
Patent No. 5612201
GENERAL INFORMATION:
APPLICANT: De Place, Etienne; Boon-Falleur, Thierry;
APPLICANT: Leth, Bernard; Szikora, Jean-Pierre; De Smet, Charles;
APPLICANT: Chomez, Patrick
TITLE OF INVENTION: Isolated Nucleic Acid Molecules Useful In
TITLE OF INVENTION: Determining Expression Of A Tumor Antigen Precurso
                                                                                                    4624 CCTGGAGTAC-GGCAGGTGCCGGACACTGATCCCGCACGCTATGAGTTCCTGTGGGGTCC 4682
                                                                                       996 AAGGGCCCTCGTTGAAACCAGCTATGTGAAAGTCCTGCACCATATGGTAAAGATCAGTGG 1055
876 AGACAGTATGTTGGGGGATCCCAAGAAGCTGCTCACCCAACATTTCGTGCAGGAAAACTA
                                           936 CCTGGAGTACCGGCAGGTCCCCGGCAGTGATCCTGCATGTTATGAATTCCTGTGGGGTCC
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COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
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US-08-299-849B-16 STANDARD; DNA; UNC; 2226 BP.
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FILING DATE: 1-SEPTEMBER-1994
CLASSIFICATION: 435
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FILING DATE: 22-MAY-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/807,043
FILING DATE: 12-DECEMBER-1991
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Hanson, No. 5612201man D. RECISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 5355
TELECOMMUNICATION INFORMATION:
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APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/705,702
FILING DATE: 23-May-1991
ATTORNEY/AGENT INFORMATION:
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APPLICATION NUMBER: 08/037,230
FILING DATE: 26-MARCH-1993
PRIOR APPLICATION DATA:
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CORRESSONDEWNER ADDRESS:
ADDRESSE: Felfe & Lynch
STREET: 805 Third Avenue
CITY: New York City
STATE: New York
ZIP: 10022
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INFORMATION FOR SEQ ID NO: 16:
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Sequence 9, Application US/08299849B
Patent No. 5612201
GENERAL INFORMATION:
APPLICANT: De Plaen, Etienne; Boon-Falleur, Thierry;
APPLICANT: Leth, Bernard; Szikora, Jean-Pierre; De Smet, Charles;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             926
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                                                                                                                                NAME/KEY: MAGE-5 gene
Sequence 2226 BP; 539 A; 542 C; 582 G; 563 T; 0 other;
                                                                                                                                                                                                Score 500; DB 7;
Pred. No. 0.00e+00;
                                                                                                                                                                                                                                           0; Mismatches
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US-08-299-849B-9 STANDARD; DNA; UNC; 4157
                                                                                          MOLECULE TYPE: genomic DNA
LENGTH: 2226 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                Query Match 60.2%;
Best Local Similarity 85.8%;
Matches 611; Conservative
                                                                    linear
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4212 GTTTTCFGCTCCTCAAATATCGAGCCAGGGAGCCAGTCACAAAGGCAGAAATGCTGGAGA
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                                                        2950 ATTTTCTGCTCCTCAAGTATCGAGCCAGGGAGCCGGTCACAAAGGCAGAAATGCTGGAGA
                                                                                                                                                                                                             3070 TGCAGCTGGTCTTTGGCATCGAGGTGGTGGAAGTGGTCCCCATCAGCCACTTGTACATCC
                                                                          GENERAL INFORMATION:
APPLICANT: Boon, Thierry, Van den Eynde, Beno t
TITLE OF INVENTION: Tumor Rejection Antigen Precursors,
TITLE OF INVENTION: Rejection Antigens and Uses Thereof
NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Diskette, 5.25 inch, 360 kb storage
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/807,043B
FILING DATE: 19911212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 9, Application US/07807043B. Sequence 9, Application US/07807043B Patent No. 5342774
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CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: (
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MEDIUM TYPE: Diskett
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Determining Expression Of A Tumor Antigen Precurso
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches 147; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: MAGE-2 gene
Sequence 4157 BP; 953 A; 1134 C; 1185 G; 885 T; 0 other;
                                                                                          CORRESPONDENCE ADDRESS:

ADDRESSEE: Felfe & Lynch
ADDRESSEE: Folfe & Lynch
STREET: New York
STATE: New York
STATE: New York
COMPUTER READABLE FORM:
WEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 488; DB 7; Pred. No. 0.00e+00;
                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/037,230
FILING DATE: 26-MARCH-1993
PRIOR APPLICATION NUMBER: 08/037,230
FILING DATE: 22-MAY-1992
PRIOR APPLICATION NUMBER: PCT/US92/04354
FILING DATE: 12-DECEMBER-1991
PRIOR APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION NUMBER: 07/764,364
FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION NUMBER: 07/705,702
FILING DATE: 23-MAY-1991
APPLICATION NUMBER: 07/705,702
FILING DATE: 23-MAY-1991
ATCHNEY AGENT INFORMATION:
                                                                                                                                                                                                                                                                    SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/299,849B
FILING DATE: 1-SEPTEMBER-1994
CLASSIFICATION: 435
PRIOR APPLICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Hanson, No. 5612201man D. REGISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 535
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEPHONE: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
 Patrick
                                                                                                                                                                                                                                                                  OPERATING SYSTEM: PC-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CUENCH: 4157 base pairs
LENGTH: 4157 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 58.7%;
Best Local Similarity 81.2%;
Matches 641; Conservative
                                                                              NUMBER OF SEQUENCES:
                   TITLE OF INVENTION:
TITLE OF INVENTION:
 APPLICANT: Chomez,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
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3370 ACCGGCAGGTGCCCGGCAGTGATCCTGCATGCTACGAGTTCCTGTGGGGTCCAAGGGCCC 3429
                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3972 CCACCTCCTCCTCTCTCTCTCTGGGCACCTGGAGGAGGTGCCCACTGCTGGGT 4031
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4332 TGCAGCTGGTCTTTGGCATTGACGTGAAGGAAGCAGACCCCACCGGCCACTCCTATGTCC
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                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 58.7%; Score 488; DB 4; Length 4157; Best Local Similarity 81.2%; Pred. No. 0.00e+00; Matches 641; Conservative 0; Mismatches 147; Indels
                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: MAGE-2 gene
Sequence 4157 BP; 953 A; 1134 C; 1185 G; 885 T; 0 other;
           PRIOR APPLICATION DATA:

APPLICATION NUMBER:

FILING DATE: 9-JULY-1991

PRIOR APPLICATION NUMBER:

PRIOR APPLICATION NUMBER:

APPLICATION NUMBER: 07/705,702

FILING DATE: 23-May-1991

ATTORNEY AGENT INFORMATION:

NAME: Hanson, No. 5342774man D.

REGISTRATION NUMBER: 10D 253.3

TELECHONE: (212) 688-9200

TELECHONE: (212) 688-9864

INFORMATION FOR SEG ID NO: 9: SEGUENCE: (212) 688-9864

INFORMATION FOR SEG ID NO: 9: SEGUENCE: (212) 688-9864

INFORMATION FOR SEG ID NO: 9: SEGUENCE: (212) 688-9864

INFORMATION FOR SEG ID NO: 9: SEGUENCE: (212) 688-9864

INFORMATION FOR SEG ID NO: 9: SEGUENCE: (212) 688-9864

INFORMATION FOR SEG ID NO: 9: SEGUENCE: (212) 688-9864
23-SEPTEMBER-1991
                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: genomic DNA
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Isolated Nucleic Acid Molecules Useful In
Determining Expression Of A Tumor Antigen Precurso
3430 TCATTGAAACCAGCTATGTGAAAGTCCTGCACCATACACTAAAGATCGGTGGAGAACCTC 3489
                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20, Application US/08299849B.
Sequence 20, Application US/08299849B
Sequence 20, Application US/08299849B
Batent No. 5612201
GENERAL INFORMATION:
APPLICANT: De Plaen, Etienne; Boon-Falleur, Thierry;
APPLICANT: Leth, Bernard; Szikora, Jean-Pierre; De Smet, Charles;
APPLICANT: Chomez, Patrick
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ZIP: 10022
COMPUTER READABLE FORM:
MEDUJUM TYPE: Diskette, 5.25 inch, 360 kb storage
COMPUTER: IBM
OPERATING SYSTEM: PC-DOS
                                                                                                                                                                                                                                                                                                             JT 14
US-08-299-849B-20 STANDARD; DNA; UNC; 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Wordperfect
CURRENT APPLICATION DATA:
PPLICATION NUMBER: US/08/299,849B
FILLING DATE: 1-SEPTEMBER-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/037,230
FILING DATE: 26-MARCH-1993
FILING DATE: 22-MAY-1992
PRIOR APPLICATION NUMBER: PCT/US92/04354
FILING DATE: 12-DECEMBER-1991
PRIOR APPLICATION NUMBER: 07/807,043
FILING DATE: 12-DECEMBER-1991
PRIOR APPLICATION NUMBER: 07/807,043
FILING DATE: 23-SEPTEMBER-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/728,838
APPLICATION NUMBER: 07/728,838
APPLICATION NUMBER: 9-JULY-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/705,702
FILLING DATE: 23-May-1991
ATTORNEY/AGENT INFORMATION:
NAME: Hanson, No. 5612201man D.
RESISTRATION NUMBER: 30,946
RESISTRATION NUMBER: 30,946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: LUD 5355
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: (212) 688-9200
TELEFAX: (212) 838-3884
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 1810 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 48
CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
CITY: New York City
STATE: New York
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APPLICANT: De Plaen, Etienne; Boon-Falleur, Thierry;
APPLICANT: Leth, Bernard; Szikora, Jean-Pierre; De Smet, Charles;
APPLICANT: Chomez, Patrick
TITLE OF INVENTION: Isolated Nucleic Acid Molecules Useful In
TITLE OF INVENTION: Determining Expression Of A Tumor Antigen Precurso
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4138 GGGCCAAGCACCTCTTGTATCCTGGAGTCCTTGTTCCGAGCAGTAATCACTAAGAAGGT 4197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 GGATGAGTTGGCTCATTTTCTGCTCCGCAAGTATCGAGCCAAGGAGCTGGTCACAAAGGC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 AGAAATGCTGGAGAGAGTCATCAAAAATTACAAGCGCTGCTTTCCTGTGATCTTCGGCAA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GGGGCCAAGCACCTCGCCTGACGCACAGTCCTTGTTCCGAGAAGCACTCAGTAACAAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 452; DB 7; Length 1068; Pred. No. 0.00e+00;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches 80; Indels
                                                                                                                                                                                                                                   ZIP: 10022
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 5.25 inch, 360 kb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: CDNA MAGE-4
Sequence 1068 BP; 258 A; 222 C; 302 G; 286 T; 0 other;
                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/299,849B
FILING DATE: 1-SEPTEMBER-1994
CLASSIFICATION 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/037,230
FILING DATE: 26-MARCH-1993
APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/04354
FILING DATE: 22-MAY-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REGISTRATION NUMBER: 30,946
REFERENCE/DOCKET NUMBER: LUD 5355
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 688-3200
TELEFAX: (212) 688-3884
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/705,702
FILING DATE: 23-May-1991
ATTORNEY, AGENT INFORMATION:
NAME: HANSON, NO. 5612201man D.
REGISTRATION NUMBER: 30,946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 23-SEPTEMBER-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 9.JULY-1991
APPLICATION NUMBER: 9-JULY-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/807,043
FILING DATE: 12-DECEMBER-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/764,364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: CDNA to mRNA
                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: Felfe & Lynch
STREET: 805 Third Avenue
CITY: New York City
STATE: New York
                                                                                                                                                                                                                                                                                  COMPUTER: IBM
OPERATING SYSTEM: PC-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             : 1068 base pairs
nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 54.4%;
Best Local Similarity 86.9%;
Matches 538; Conservative
                                                                                                                                                                                                                                                                                                                      SOFTWARE: Wordperfect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS: single
                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               inear
                  GENERAL INFORMATION:
                                                                                                                                                                                           CITY: Ne. STATE: New Y
 Patent No. 5612201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH:
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                                                                                                                                                                                                                                                                                                                                                                                       976 CGGCCACTCCTACATCCTTGTCACCTGCCTGGGCCTCTCCTATGATGGCCTGCTGGGTGA 1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1036 TGATCAGAGTACGCCCAAGACCGGCCTCCTGATAATCGTCCTGGGCATGATCTTAATGGA 1095
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          915
                                                                                                                                                                   556 GCAGAAGGCTGCATCCTCTACTCTGATCATGGGAACCCTTGAGGAGGTGACTGA 615
                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           856 GGCAGAAATGCTTGAGAGTGTCATCAAAAATTACAAGAACCACTTTCCTGATATCTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4614 AGGAAAAGTACCTGGAGTACGGC-AGGTGCCGGACGGTGATCCCGCACGCTATGAGTTCC
                                                                                                                                                                                                                                                                                                        676 CGACACCACTCTGTGGAGCCAATCCGATGAGGGTTCCAGCAGCAATGAAGAGGGGGCC
                                                                                                                                                                                                                                                                                                                                                                      736 AAGCACCTCCCCGGACCCAGCTCACCTGGAGTCCCTGTTCCGGGAAGCACTTGATGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                        796 AGTGGCTGAGTTAGTTCGTTTCCTGCTCCGCAAATATCAAATTAAGGAGCCGGTCACAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGGGAGGAGCACAGTGTCTATTGGAAGCTCAGGAAGCTGCTCACCCAAGAGTGGGTGC
                                                                                                                                                                                                                                                                                                                      Score 464; DB 7; Length 1810;
Pred. No. 0.00e+00;
0; Mismatches 133; Indels 11;
                                                  NAME/KEY: MAGE-8 gene
Sequence 1810 BP; 402 A; 463 C; 508 G; 437 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
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US-08-299-849B-15 STANDARD; DNA; UNC; 1068
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Sequence 15, Application US/08299849B.
Sequence 15, Application US/08299849B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1336 GGGTCAATGCAAGAGTTCGCATTTCCT 1362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4733 AGGICAGIGCAAGAGITCGCITITICI 4759
                 MOLECULE TYPE: genomic DNA
                                                                                                  Query Match 55.8%;
Best Local Similarity 82.2%;
Matches 663; Conservative
TOPOLOGY: linear
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                                                                                          481 AAACTACCTGGAGTACCGGCAGGTACCCGGCAGTAATCCTGCGCGCTATGAGTTCCTGTG 540
                                                                                                                              CAGTGCAAGAGTTCGCTTT 4755
                                                                                                                          CAATGCAAGAGTTCGCATT 619
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Search completed: Tue Apr 7 22:20:44 1998 Job time: 53 secs.

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Release 2.1D John F. Collins, Biocomputing Research Unit. Copyright (c) 1993, 1994, 1995 University of Edinburgh, U.K. Distribution rights by IntelliGenetics, Inc.

- n.a. database search, using Smith-Waterman algorithm п.а. MPsrch_nn Tue Apr 7 21:57:15 1998; MasPar time 152.21 Seconds 1266.269 Million cell updates/sec Run on:

not generated. Tabular output

>US-08-190-411A-1 (57-219) from 5541104.seq 163 Description: Perfect Score: N.A. Sequence:

TABLE default Gap 6 Scoring table:

354530 seqs, 591221332 bases x 2 Searched:

Dbase 0; Query 0

STD

Nmatch

Minimum Match 0% Listing first 45 summaries Post-processing:

Database:

1:em_in 2:em_or 3:em_om 4:em_ov 5:em_pl 6:em_htg 7:em_hum1 8:em_hum2 9:em_ba 10:em_ro 11:em_un 12:em_vi 13:em_pat

genbank105

Database:

14:gb_ro 15:gb_om 16:gb_ov 17:gb_in 18:gb_pl 19:gb_ba 20:gb_st 21:gb_vi 22:gb_ph 23:gb_sy 24:gb_un 25:gb_pat 26:gb_htg

scale 1.987 Mean 8.931; Variance 4.495; Statistics: Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Pred. No.	1.03e-107	1.03e-107	2.47e-34	1.43e-33	2.13e-06	6.77e-04	1.55e-01	2.01e+00	2.01e+00	6.93e+00	6.93e+00	6.93e+00	6.93e+00	6.93e+00
	Description	Sequence 1 from patent	Sequence 8 from patent	Sequence 9 from patent	Sequence 10 from paten	Sequence 5 from patent	Sequence 5 from patent	gDNA encoding envelope	Sequence 13 from paten	Sequence 7 from patent	Mus musculus T-box fam	gDNA encoding envelope	Sauromalus obesus stra	Sequence 13 from Paten	Dog pulmonary surfacta
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фP	Query Match	100.0	100.0	43.6	42.9	19.6	17.2	14.7	13.5	13.5	12.9	12.9	12.9	12.9	12.9
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		Brug	Bruggen, P.,	P., Boon-Falleur,	1-10	a11	T. and	old, L.J.		
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                                                                                                                1 (bases 1 to 5674)
De Plaen,E., Boon-Falleur,T., Lethe ,B., Szikora,J., De Smet,C. and
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De Plaen, B., Boon-Falleur, T., Lethe, B., Szikora, J., De Smet, C. and
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Mismatches 31; Indels
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Patent: US 5612201-A 8 18-MAR-1997;
Location/Qualifiers
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Sequence 9 from patent US 5612201.
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136923 5674 bp DNA
Sequence 8 from patent US 5612201.
136923
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Best Local Similarity 77.1%;
Matches 108; Conservative
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Best Local Similarity 100.0%;
Matches 163; Conservative
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De Plaen, E., Boon-Falleur, T., Lethe, B., Szikora, J., De Smet, C. and
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Bennett,A., Labavitch,J.M., Powell,A. and Stotz,H.
Plant inhibitors of fungal polygalacturonases and their use to control fungal disease
Patent: US 5569830-A 5 29-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                74 GACGCCACTGACCTTGCGCGTTGGAGGTCAGAGAACAGCGAGATTCTCGCCCTGAGCAACG 133
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Pred. No. 2.13e-06;
37; Mismatches 33
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Patent: US 5612201-A 10 18-MAR-1997;
Sequence 10 from patent US 5612201.
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Best Local Similarity 17.6%;
Matches 15; Conservative
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JP 1992349885-A/1.
Hepatitis C virus.
Hepatitis C virus.
Hepatitis C virus
Viruses: ssRNA positive-strand viruses, no DNA stage; Flaviviridae;
Hepatitis C-like viruses.
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TSUCEEC AGID FRAGMENT WITHIN ENVELOPE REGION OF HEPATITIS C VIRUS
AND METHOD FOR DETECTING THE SAME
PATENT: JP 1992349885-A 1 04-DEC-1992;
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                                                                                                                                  1 (bases 1 to 215)
Bennett, A., Labavitch, J.M., Powell, A. and Stotz, H.
Bennett, A., Labavitch, J.M., Powell, A. and Stotz, H.
Blant inhibitors of fungal polygalacturonases and their use to control fungal disease
Patent: US 5569830-A 5 29-OCT-1996;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                 121 CTCTCAACCCAGGAAGCCCAGGTGCCCAGATGTGACGCCACTGACTTGAGCATTAGTGG 180
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                                                                                                                                                                                                                                                                                                                                      1; Gaps
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GDNA encoding envelope region of type C hepatitis virus.

E04076
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               30-0CT-1996
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JP 1992349885-A/1
04-DE-1992
29-MAY-1991 JP 1991152169
MORINAGA TSUTAE, CHAYAMA KAZUAKI, KUMADA HIROMITSU, PI
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                                                                                                                                                                                                                                                                                                  Score 28; DB 25; Length 215;
Pred. No. 6.77e-04;
46; Mismatches 35; Indels
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Pred. No. 1.55e-01;
25; Mismatches 22; Indels
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strandedness: Single;
topology: Linear;.
Location/Qualifiers
               PAT
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/db_xref="taxon:11103"
93 c 107 g 85 t
                                                                                                                                                                                                                                                                                                                                                                                                                                             181 TTAGAGAGAGGGAGGTTTTCGGTCTGAGGGGCGG 215
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    1401/8 215 bp DNA
Sequence 5 from patent US 5569830.
128278
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8 c 25 g
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Best Local Similarity 30.9%;
Matches 21; Conservative
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Best Local Similarity 13.7%;
Matches 13; Conservative
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OS Hepatitis C
PN UP 19923498
PD 04-DEC-1992
PF 29-MAY-1991
PI MORINGA TSU
ICHIKAWA YATARO
PC CIZNIS/IO,CI
CC Strandedness
CC topology: Li
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                                                                                                       Unknown.
Unclassified.
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1 (bases 1 to 105)
Miller,M.M.
Miller,M.M.
Millertction fragment length polymorphism test for haplotyping
domesticated fowl
Patent: US 5451670-A 13 19-SEP-1995;
Location/Qualifiers
                       20-SEP-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                            AF013283 531 bp mRNA ROD 10-JAN-1998 Mus musculus T-box family member (MmTbx7) mRNA, partial cds. AF013283 92735916
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Jacobs, K., McCoy, J.M., LaVallie, E.R., Racie, L.A., Merberg, D., Treacy, M. and Spaulding, V.
Secreted proteins and polynucleotides encoding them Patent: US 5654173-A 7 05-AUG-1997;
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                                                                                                                                                                                                                                                                                                   81 others
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Pred. No. 2.01e+00;
24; Mismatches 37; Indels
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Sequence 13 from patent US 5451670. 114734
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159655
92478287
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103 c 120 g
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Best Local Similarity 27.8%;
Matches 10; Conservative
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Best Local Similarity 11.6%;
Matches 8; Conservative
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Unclassified.
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67 TTTGGATGG 59
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LOCUS 108570 1442 bp
DEFINITION Sequence 13 from Patent WO 8706588.
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Similarity 81.8%;
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CCG 107
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/d_xxef="ptD:92735917"
/translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation="https://translation=
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Hepatitis C virus.
Hepatitis C virus
Viruses, ssRNA positive-strand viruses, no DNA stage, Flaviviridae,
Viruses, ssRNA positive-strand viruses.

I (bases 1 to 565)
Tsutae,M., Kazuaki,C., Hiromitsu,K. and Yataro,I..
NUCLEIC ACID FRAGMENT WITHIN ENVELOPE REGION OF HEPATITIS C VIRUS
PATENT: JP 1992349885-A 1 04-DEC-1992;
                                                                                                                                                                                                                                                     Unpublished

2 (bases 1 to 531)

Wattler, S., Russ, A., Evans, M. and Nehls, M.

Direct Submission

Submitted (10-UUL-1997) New Technologies, Lexicon Genetics

Incorporated, 4000 Research Forest Drive, The Woodlands, TX 77381,
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                                                                                                                                                                                                        T-box
                                                                       Eukaryotae; Metazoa, Chordata; Vertebrata; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (bases 1 to 531)
Wattler, S., Russ, A., Evans, M. and Nehls, M.
A combined analysis of genomic and primary protein structure defines the phylogenetic relationship of new members of the T-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E04076 565 bp RNA PAT 26-NOV-1996 gDNA encoding envelope region of type C hepatitis virus. E04076
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MORINAGA TSUTAE, CHAYAMA KAZUAKI, KUMADA HIROMITSU,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
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Pred. No. 6.93e+00;
0; Mismatches 16; Indels
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/note="T-box family member; T-box domain"
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strandedness: Single;
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/db_xref="taxon:11103"
                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
1. 531
/organism="Mus musculus"
/db_xref="taxon:10090"
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<1. .>531
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JP 1992349885-A/1
04-DEC-1992
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Best Local Similarity 69.8%;
Matches 37; Conservative
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PN JP 199234988
PD 04-DEC-1991
PF 29-MAY-1991
PI MORINAGA TSU
ICHIKAMA YATARO
PC C12N15/10,C1
CC strandedness
CC topology: Li
                                                          Mus musculus
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REFERENCE
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/translation="LidlpapsNisawwhegslidiclijcilglelamhytadiss
AFSSTAHICRDVQYGWLIRNLHANGASWFFICLYLHIGRGLYYGSYLEKEFWNIGVV
LLLVMATAFVGYYLPWGQWSFWGATVTNLLSATPYVGATLVWHIWGGFSVDNATLTR
FFFHFILDFWHIGLTTAMHLLEHENGSNNPTGLNSNPDKIPFHPYFSYKDLLGATLW
IILLITLALFSPNLLGDPENFTPAIPLYTPHIKPEWYFLFAYAILKSIPNKLGGYLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mitochondrion Sauromalus obesus
Eukaryotae; Metazoa; Chordata; Vertebrata; Lepidosauria; Squamata;
Iguaniae; Iguanidae; Sauromalus.

1 (bases 1 to 902)
Petren, K. and Case, T.J.
A Phylogenetic analysis of body size evolution and biogeography in Evolution 51, 206-219 (1997)
2 (bases 1 to 902)
2 (bases 1 to 902)
Direct Submission
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                                                                                                                                                                                         251 ARRRYRRYNNYTCBMGNTGYTGGGYRGCGCTBACYCCCACGSTYGCVRCYAGRRAYVBYA 310
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/db_xref="taxon:51219"
/note="specimen from Panamint Springs, CA (pop. #15)"
<1. .>902
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Washington Rd., Princeton, NJ 08544-1003, USA
Location/Qualifiers
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No. 6.93e+00;
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320 c 120 g 218
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/db_xref="PID:g2444307"
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POCHHMLGTYFPVVVDYFOSQINPRIICKHLGICKPGLPEPEOESELSDPLLDKLILP
ELDEALLOYTGPHTODLSEOQIPPIPPCVCMCRTLITRROAMISKGYLAVVGOVCHVV
PLVVGGTCOCCGERYTVGLDALLGENLEPQLVCGLVLRCSHEDSAPALASLPSEWSP
GESKCQLCMFVTTQAGNHSEQATPQAIRQACLSSWLDRQKCEQFVEQHMPRLQTLASG
GRDAHTTCOALGACRTTFSPLQCIHIPHF"

541 . 1092
Antifactant protein 18"

452 c 388 g 295 t
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Vertebrata; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
1 (bases 1 to 1442)
Hawgood, S., Benson, B. J., Schilling, J., Damm, D. L., Clements, J. A. and White, R. T.
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/db_xref="PID:9164078"
/translation="LIWLLLPTLCGLGAADWSAPSLACARGPAFWCQSLEQALQCRA
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1 (bases 1 to 1442)
Schilling,J.W., White,R.T., Cordell,B. and Benson,B.J.
Patent: WO 8706588-A 13 05-NOV-1987;
Location/Qualifiers
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Best Local Similarity 67.8%; Pred. No. 6.93e+00;
Matches 40; Conservative 0; Mismatches 19; Indels
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/db_xref="taxon:9616"
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                                                                                                                  Schilling, J.W., White, R.T., Cordell, B. and Benson, B.J. Recombinant alveolar surfactant protein Patent: BP 0251449-A2 4 07-JAN-1988; Location/Qualifiers
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Pred. No. 6.93e+00;
0; Mismatches 19; Indels
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           108031 1442 bp
Sequence 4 from Patent EP 0251449.
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15	23 2.8 170309 26 AC003061 *** SEQUENCING IN PROG 1.01	RESULT 1 15692 2419 bp DNA PAT 21-APR-1997 DEFINITION Sequence 7 from patent US 5612201.	g2084882 Unknown. M Unknown. Inclassified. I (bases 1 to 2419) De Plaen,E., Boon-Falleur,T., Lethe ,B., Szikora,J., De Smet,C. e	TITLE ISOLATED NOCIDEC ACID MOLECULES USEIUL IN DECEMBLING EXPRESSION OF A LUMOR REJECTION AND AND AND AND AND AND AND AND AND AN	Query Match 100.0%; Score 831; DB 25; Length 2419; Best Local Similarity 100.0%; Pred. No. 0.00e+00; Matches 0; Gaps 0; Matches 831; Conservative 0; Mismatches 0; Indels 0; Gaps 0; Db 676 GGCCAACAGAGGCCTGGTGTGTGTGTGCAGCTGCTCCTCCTCCTCCTCCTCCTCCTCCTCCTCCTCCTC
ease 2.1D yright (c) byright (c) bistr Tue Ap t not gene >905-08 (3931-		Searched: 354530 seqs, 591221332 bases x 2 Post-processing: Minimum Match 0% Listing first 45 summaries	Database: embl53 I:em_in 2:em_or 3:em_om 4:em_ov 5:em_pl 6:em_htg I:em_hum1 8:em_hum2 9:em_ba 10:em_ro 11:em_un 12:em_vi I3:em_pat	Statistics: Mean 10.687; Variance 5.190; scale 2.059 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution. SUMMARIES	No. Score Match Length DB ID Description Pred. No.

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Patent: US 5612201-A 8 18-MAR-1997;
Location/Qualifiers
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Monoclonal antibodies which bind to tumor rejection antigen
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Patent: US 5541104-A 1 30-JUL-1996;
Location/Qualifiers
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Isolated nucleic acid molecules useful
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Patent: US 5612201-A 14 18-MAR-1997;
Location/Qualifiers
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Pred. No. 0.00e+00;
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Pred. No. 0.00e+00;
0; Mismatches 101; Indels
                                                                             1 (bases 1 to 2531)
De Plaen,E., Boon-Falleur,T., Lethe ,B.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a tumor rejection antigen precursor
Patent: US 5612201-A 13 18-MAR-1997
5612201.
                                                                                                                                            Location/Qualifiers
1. .2531
                                                                                                                                                                  /organism="unknown"
593 c 700 g
  from patent US
                                                                                                                                                                                                               ch 70.0%;
1 Similarity 87.1%;
689; Conservative
                                                                    Unclassified.
Sequence 13 1
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Pred. No. 0.00e+00;
0; Mismatches 96; Indels 4
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De Plaen, E., Boon-Falleur, T., Lethe, B., Szikora, J.,
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Patent: US 5612201-A 17 18-MAR-1997,
Location/Qualifiers
1. .2305
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568 c 611 g
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136932
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1 Similarity 86.4%;
633; Conservative
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De Plaen,E., Boon-Falleur,T., Lethe ,B., Szikora,J., De Smet,C. and
                                                                                                                                                                                                                                                              Chomez, P. Isolated nucleic acid molecules useful in determining expression of
                                4564 GCACAGTGCCTATGGGGAGCCCAGGAAGCTGCTCACCCAAGATTTGGTGCAGGAAAAGTA 4623
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Pred. No. 0.00e+00;
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Patent: US 5612201-A 11 18-MAR-1997;
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Sequence 11 from patent US 5612201
136926 92084886
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1 Similarity 81.8%;
652; Conservative
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                                                                                                                                                                 AAGGGCCCTCGTTGAAACCAGCTATGTGAAAGTCCTGCACCATATGGTAAAGATCAGTGG 1055
                                                                                                                                                                               4683 AAGGCCCTCGCTGAAACCAGCTATGTGAAAGTCCTTGAGTATGTGATCAAGGTCAGTG 4742
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                                                                                                       CCTGGAGTACCGGCAGGTCCCGGCAGTGATCCTGCATGTTATGAATTCCTGTGGGGTCC
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Pred. No. 0.00e+00;
0; Mismatches 99;
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De Plaen,E., Boon-Falleur,T., Lethe ,B.,
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Pred. No. 0
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1 Similarity 85.8%;
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Chomez, P.
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De Plaen,E., Boon-Falleur,T., Lethe ,B., Szikora,J., De Smet,C. and
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            GAGGAGCTGAGTGTGATGAGGTGTATGTTGGGAGGGAGCGACACAGTGTCTGTGGGGAGCCC
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GACTCCTATGATGGCCTGCTGGTTGATAATAATCAGATCATGCCCCAAGACGGGCCTCCTG
                                                  ATAATCGTCTTGGGCATGATTGCAATGGAGGGCAAATGCGTCCCTGAGGAGAAATCTGG
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Pred. No. 0.00e+00;
0; Mismatches 147; Indels
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Patent: US 5612201-A 9 18-MAR-1997;
Location/Qualifiers
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Sequence 9 from patent US 5612201.
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1134 c 1185 q
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Best Local Similarity 81.2%;
Matches 641; Conservative
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Unclassified.
1 (bases 1 to 1810)
De Plaen,E., Boon-Falleur,T., Lethe ,B., Szikora,J., De Smet,C.
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4332 TGCAGCTGGTCTTTGGCATTGACGTGAAGGAAGCAGACCCCACCGGCCACTCCTATGTCC 4391
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                                       TIGICACCIGCCTGGGCCTCTCCTACGAIGGCCTGCTGGGCGACAAICAGGICAIGCCCA
                                                                                                                   AGACAGGCCTCCTGATAATCGTCCTGGCCATAATCGCAATAGAGGGCGACTGTGCCCCTG
                                                                                                                                     ACCGGCAGGTGCCCGGCAGTGATCCTGCATGCTACGAGTTCCTGTGGGGTCCAAGGGCCC
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                                                         0; Mismatches 133; Indels 11;
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Pred. No. 0.00e+00;
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1 Similarity 82.2%;
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De Plaen,E., Boon-Falleur,T., Lethe ,B., Szikora,J., De Smet,C. and
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                                                                                                                                                                                                        ATGGGAGGAGCACAGTGTCTATTGGAAGCTCAGGAAGCTGCTCACCCAAGAGTGGGTGC 1215
                                                  GGCAGAAATGCTGGAGAGTGTCAAAAATTACAAGCACTGTTTTCCTGAGATCTTCGG 4314
                                                                                GGGCAGCCGCCCCGGAGGAGGCAATCTGGGAAGCATTGAGTGTGATGGGGGCTGTATG 1155
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                                                                                                              CGGCCACTCCTACATCCTTGTCACCTGCCTGGGCCTCTCCTATGATGGCCTGCTGGGTGA
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Pred. No. 0.00e+00;
                                        Chomez, P.
Isolated nucleic acid molecules useful
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Patent: US 5612201-A 15 18-MAR-1997;
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Pred. No. 0.00e+00;
0; Mismatches 158; Indels 11;
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De Plaen,E., Boon-Falleur,T., Lethe ,B.,
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Patent: US 5612201-A 19 18-MAR-1997;
Location/Qualifiers
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Sequence 19 from patent US 5612201.
136934
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499 c 538 g
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Similarity 78.4%;
615; Conservative
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ACCCCGCTCACCTGG--CGTCCTTGTTCCAATGGGAAGGTGGCTGAGTTGGTTCGCTTCC
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Pred. No. 5.56e-298;
0; Mismatches 147; Indels 10;
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De Plaen,E., Boon-Falleur,T., Lethe ,B.,
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Patent: US 5612201-A 21 18-MAR-1997,
Location/Qualifiers
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Matches 592; Conservative
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Isolated nucleic acid molecules useful in determining expression a tumor rejection antigen precursor Patent: US 5612201-A 23 18-MAR-1997;
Location/Qualifiers
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                                                                                                            TAGCATGCTGGGTGATGGTCATAGCATGCCCAAGGCCGCCCTCCTGATCATTGTCCTGGG
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                       CTCCTCCATTTCCGTCTACTACACTTTATGGAGCCAATTCGATGAGGGCTCCAGCAGTCA
                                  685 AGAAGAGGAAGAGCCAAGCTCCTCGGTCGACCTCAGCTGGAGTTCATGTTCCAAGA
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De Plaen,E., Boon-Falleur,T., Lethe ,B., Szikora,J., De
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Best Local Similarity 74.9%; Pred. No. 1.32e-260;
Matches 597; Conservative 0; Mismatches 189; Indels
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1 (bases 1 to 1866)
Lurquin.c. and Boon-Falleur.T.
Isolated nucleic acid molecules which are members of the MAGE-Xp
family and uses thereof

Unclassified.

REFERENCE AUTHORS TITLE

SOURCE ORGANISM

KEYWORDS

NID

91823086 Unknown. Unknown

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 Length 1866;
                                Indels
                                  0; Mismatches 157;
Score 184; DB 25;
Pred. No. 5.95e-125;
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22.1%;
68.7%;
                 Best_Local Similarity 68.7%;
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Release 2.1D John F. Collins, Biocomputing Research Unit. Copyright (c) 1993, 1994, 1995 University of Edinburgh, U.K. Distribution rights by IntelliGenetics, Inc.

n.a. - n.a. database search, using Smith-Waterman algorithm MPsrch_nn Tue Apr 7 22:18:14 1998; MasPar time 75.03 Seconds 1271.809 Million cell updates/sec Run on:

Tabular output not generated.

>US-08-190-411A-1
(3931-4761) from 5541104.seq
831
3931 GCCCCAACAAGAGCCCTGG.......CAAGAGTTCGCTTTTTCTTC 4761
CCGGGTTGTTCTCCGGGACC......GTTCTCAAGCGAAAAAAAAG Description: Perfect Score: N.A. Sequence:

TABLE default Gap 6 Scoring table:

Dbase 0; Query 0 STD Nmatch

159649 seqs, 57412152 bases x 2 Searched:

Minimum Match 0% Listing first 45 summaries Post-processing:

1:n-geneseq1 n-geneseq30 Database:

Mean 8.982; Variance 5.045; scale 1.780 Statistics:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		dР					
Result No.	Score	Query	Query Match Length DB	DB	ID	Description	Pred. No.
	831	100.0	2419		072476	Tumour rejection antiq	0.00e+00
7	831	100.0	2419	-	032351	Antiqen E qene.	0.00e+00
m	831	100.0	5674	-	072477	Tumour rejection antig	0.00e+00
4	831	100.0	5724	Н	098902	Tumour rejection antig	0.00e+00
ιΩ	829	8.66	5674	-	032352	MAGE-1 nucleic acid.	0.00e+00
9	827	99.5	2419	Н	T05086	MZ2-MEL antigen E prec	0.00e+00
7	825	99.3	2420	Н	972472	Tumour rejection antiq	0.00e+00
ω	825	99.3	2420	-	085435	Human melanoma antiqen	0.00e+00
σ	781	94.0	1084	-	967866	H6/MAGE-1 expression c	0.00e+00
10	781	94.0	1094	Н	067865	H6/MAGE-1 expression c	0.00e+00
11	584	70.3	2531	Н	072483	Tumour rejection antiq	0.00e+00
12	582	70.0	2531	Н	072482	Tumour rejection antig	0.00e+00
13	580	69.8	2531	Н	032358	MAGE-41 gene.	0.00e+00
14	580	69.8	2531	Н	032357	MAGE-4 gene.	0.00e+00
15	513	61.7	2305	Н	032361	MAGE-51 genomic DNA.	0.00e+00
16	513	61.7	2305	Н	T01165	MAGE-51 gene.	0.00e+00
17	513	61.7	2305	Н	072486	Tumour rejection antig	0.00e+00
18	502	60.4	1640	-	072480	Tumour rejection antig	0.00e+00
19	200	60.2	2226	Ч	032360	MAGE-5 CDNA.	0.00e+00
20	200	60.2	2226	 1	072485	Tumour rejection antig	0.00e+00

0.00e+00 0.0	
MAGE-3 cDNA. Tumour rejection antig MAGE-8 gene. MAGE-8 gene. MAGE-8 genenic DNA. Tumour rejection antig MAGE-7 gene. MAGE-7 gene. MAGE-7 gene. MAGE-7 gene. MAGE-9 genenic DNA. MAGE-9 gene. MAGE-9 gene. MAGE-9 gene. MAGE-9 gene. MAGE-9 gene. MAGE-11 gene. MAGE-11 gene. MAGE-11 gene. Baboon MAGE-3 homologu	
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27-MAY-1992.
28-NAY-1992.
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                   4111 TGAGGGTTCCAGCAGCCGTGAAGAGGAGGGGCCCAAGCACCTCTTGTATCCTGGAGTCCTT
                                                                                   TGACGTGAAGGAAGCAGACCCCACCGGCCACTCCTATGTCCTTGTCACCTGCCTAGGTCT
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                                                                   GTTCCGAGCAGTAATCACTAAGAAGGTGGCTGATTTGGTTTGGTTTTCTGCTCCTCAAATA
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 TGAGGGTTCCAGCAGCCGTGAAGAGGGGGCCCAAGCACCTCTTGTATCCTGGAGTCCTT
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Q32351 standard; DNA; 2419
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This sequence was contain three exons. The open reading frame for antigen B was contained within the first two exons. An ATG is located at position 60 fexon 3 and is followed by an 828 base pair reading frame. The three exons contain 65, 73 and 1551 base pairs. During the isolation of this sequence two different but closely reated cDNAs were also identified. These cDNAs, when tested, did not transfer expression of antigen E, but they did show substantial homology to the antigen E cDNA sequence. These new cDNAs represent a new family of genes refered to as melanoma antigens (MAGE) (see also
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                                                                                                                                                                                                                                         599 T;
                                                                                                                                                                                                                                                                              Score 831; DB 1; Length 241
Pred. No. 0.00e+00;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                         677 G;
                                                                                                                                                                                                                                         581 C;
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Local Similarity 100.0%;
les 831; Conservative
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Q32352-69).
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Q72477 is the DNA sequence which encodes melanoma antigen-1
(Q72477 is the DNA sequence which encodes melanoma antigen-1
this is a tumour rejection antigen precursor. Melanomas
characterised by the expression of MAGE-3 can be detected, or
monitored, by contacting a test sample with an agent that can
recognise MAGE-3. The melanoma can be treated by the administration
of cytolytic T cells specific for the complex of antigen D (the
mature rejection antigen derived from MAGE-3) and a human leucocyte
antigen (esp. HLA-A1).

1276 A; 1644 C; 1569 G; 1185 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                         Tumour rejection antigen MAGE-1 encoding DNA.
Tumour rejection antigen; melanoma antigen-1; MAGE-1; MAGE-3;
cancer; cytolytic T cells; antigen D; human leucocyte antigen;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New tumour rejection antigen precursor MAGE3 - useful in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (LUDW-) LUDWIG INST CANCER RES.
Boon-falleur T, Gaugler B, Van DEN EYNDE B,
                                                                                                                                                                                                                                                                                       Location/Qualifiers 3881. .4711
JT 3
Q72477 standard; DNA; 5674 BP.
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WO9423031-A.
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                                                                                                                                                                                                                         4710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New monoclonal antibody binding specifically to MAGE-1 - useful for diagnosis and monitoring of cancer, also new hybridomas, recombinant MAGE-1 and immunogenic peptide(s)
Disclosure; Page 16-19; 33pp; English.
A monoclonal antibody directed against the tumour rejection antigen (MAGE-1) can be used to detect MAGE-1 in samples by standard immunosasay methods for diagnosis and monitoring of cancer etc. The monoclonal antibody is designated MA454 and is produced by the hybridoma deposited as ATCC HBB11540. The monoclonal antibody is specific for MAGE-1, having no reactivity for MAGE-2 or MAGE-3. Peptide fragments of MAGE-1 (See R80618-20) may be useful as immunogens for production of the monoclonal antibody and antisera. Sequence 5724 BP; 1282 A; 1653 C; 1589 G; 1200 T;
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                                                                               TCTGGTCCTGGGCACCCTGGAGGAGGTGCCCACTGGTGGTCAACAGATCCTCCCCAGAG
 TGTCCTGGTCATGATTGCAATGGAGGCCGCCATGCTCCTGAGGAGGAAATCTGGGAGGA
                GGCCCAACAAGAGGCCCTGGGCCTGGTGTGTGCAGGCTGCCACCTCCTCCTCCTCTCCT
                                                              GCTGAGTGTGATGGAGGTGTATGATGGGAGGGAGCACAGTGCCTATGGGGAGCCCAGGAA
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                                                                                                                                                                                                                                                                                                                                                                     098902;
28-FEB-1996 (first entry)
Tumour rejection antigen (MAGE-1) gene.
Tumour rejection antigen; MAGE-1; monoclonal antibody; MAb;
diagnosis; immunoassay; cancer; ss.
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                                                                                                                                                                                                                                                     Score 831; DB 1; Length 572. Pred. No. 0.00e+00; 0; Mismatches 0; Indels
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/note= "The CDS is not indicated in the text of the specification but is suggested in the layout
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(SLOK ) SLOAN KETTERING INST CANCER RES.
(SLOK ) MEMORIAL SLOAN-KETTERING CANCER CENT.
(SLOK ) MEMORIAL SLOAN-KETTERING CANCER CENT.
SLOCKELL E, Van der bruggen P; Old
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers 3881. .4711
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nes 831; Conservative
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05-JAN-1995; U00095.
01-FEB-1994; US-190411.
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WO9520974-A1.
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                                  TGAGGGTTCCAGCAGCCGTGAAGAGGGGGCCCAAGCACCTCTTGTATCCTGGAGTCCTT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleic acid mol. encoding a human tumour rejection antigen precursor - useful as an immunostimulant in a vaccine for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (LUDW-) LUDWIG INST CANCER RES.
Boon T, Chomez P, De Plaen E, Lurquin C, Traversari
Van Den Eydde B, Van Der Bruggen P, Van Pel A;
WPI: 92-Eyn60/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          melanoma antigen; MAGE TRA; melanoma antigen tumor tumor rejection antigen precursor; MAGE; antigen E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
3881. .4711
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Q32352 standard; DNA; 5674
Q32352;
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w09220356-A.
26-NOV-1992.
22-NAY-1992; U04354.
23-MAY-1991; US-705702.
09-JUL-1991; US-728838.
23-SEP-1991; US-764364.
12-DEC-1991; US-807043.
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MAGE-1 nucle
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treating and preventing cancers, also useful in diagnosis
Disclosure: Page 71-73; 142pp; English.
The sequences given in 032352-69 represent a new family of genes
referred to as melanoma antigens (MAGE). The CDNAs of this gene
family were identified during the isolation of the antigen E gene.
The MAGE CDNAs, when tested, did not transfer expression of antigen
E, but they did show substantial homology to the antigen E cDNA
sequence. The MAGE DNAs share a certain degree of homology with each
other and are expressed in tumour cells including several types of
human tumor cells as well as in human tumors. MAGE expression is not
restricted to melanomas. MAGE refers to a family of tumor rejection
antigen precursors. The antigens resulting from these genes are
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Pred. No. 0.00e+00;
0; Mismatches 1;
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Local Similarity 99.9%;
es 830; Conservative
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US-08-190-411A-1.rng

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582 C;
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Local Similarity 99.9%;
les 831; Conservative
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Q72472 standard; DNA; 2420
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A gene sequence (105086) hybridizes with a 2.4 kb fragment from human melanoma cell line M22-MEL but not with E- antigen loss variants of M22-MEL. This E precursor antigen gene sequence was obtd. from a cosmid derived from DNA of the E+ subclone M22-MEL 43. Sequence 2419 BP; 560 A; 581 C; 677 G; 601 T;
                                                                                                                                                     MZ2-MEL antigèn E precursor gene.
Melanoma; MZ2-MEL; tumour rejection antigen; cancer; diagnosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Determn. of cancerous condition(s) - using a nucleic acid as a primer to determine expression of a MAGE tumour rejection antigen
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Chomez P, De Plaen E;
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23-FEB-1995:

01-MAR-1994; US-204727.

10-MAR-1994; US-299849.

30-NOV-1994; US-34677.

(LUDW-) LUDWIG INST CAUCE RES.

BOOn-Falleur T, Brasseur F, C
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T05086 standard; DNA; 2419
                                                                                                                                     (first entry)
                                                                                                                                                                                               Homo sapiens.
WO9523874-A1.
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New tumour rejection antigen precursor MAGE3 - useful in treatment and diagnosis of cancer Example 20; Page 28; 105pp; English.

O/2472 is the tumour rejection antigen E precursor gene, another gene 072470 encodes melanoma antigen=3 (MAGE-3) also a tumour rejection antigen precursor. Melanomas characterised by the expression of MAGE-3 can be detected, or monitored, by contacting a test sample with an agent that can recognise MAGE-3. The melanoma can be treated by the administration of cytolytic 7 cells specific for the complex of antigen b (the mature rejection antigen derived from MAGE-3) and a human leucocyte antigen (esp. HIA-A1).
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GATCCCGCACGCTATGAGTTCCTGTGGGGTCCAAGGGCCCTCGCTGAAACCAGCTATGTG
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Tumour rejection antigen E precursor gene DNA.
Tumour antigen rejection precursor E; melanoma antigen-3; MAGE-3; cancer; cytolytic T cells; antigen D; human leucocyte antigen; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      736 TCTGGTCCTGGGCACCCTGGAGGAGGTGCCCACTGCTGGGTCAACAGATCCTCCCCAGAG
                                                                                GCTGAGTGTGATGGAGGTGTATGATGGGAGGGAGCACAGTGCCTATGGGGAGCCCAGGAA
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Pred. No. 0.00e+00;
0; Mismatches 0; Indels
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17-MAR-1994; U02877.
26-MAR-19993; US-037230.
Boon-falleur T, Gaugler B, Van DEN EYNDE B,
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Synthetic.
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Muman melanoma antigen; MAGE-1; vaccines; MAGE associated tumours;
HLA-restricted cytotoxic T-lymphocyte activity; ss.
Homo sapiens.
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Sequence 2420 BP; 562 A; 5
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085435; standard; DNA; 2420 BP.
085435;
09-0CT-1995 (first entry)
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Similarity 99.9%;
31; Conservative
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P-PSDB; R70909.
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02-AUG-1994; UO8721.
06-AUG-1993; US-103623.
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H6/MAGE-1 expression cassette from pMAW037.
Polymerase chain reaction; primer; amplify; NYVAC; ALVAC; recombinant; human; MAGE-1; melanoma-associated antigen; MZ2-E; testis; pTZ18RWAGE1; primary melanoma tumour cell; melanoma-derived cell line; tumour; poxvirus; antigenic response; immunological response; pathogen; ss.
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                                                                                                             TCTGGTCCTGGGCACCCTGGAGGAGGTGCCCACTGCTGGGTCAACAGATCCTCCCCAGAG
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1..51
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/note= "Vaccinia H6 promoter"
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Q67866 standard; DNA; 1084
Q67866;
22-MAR-1995 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sednence"
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/note= "Flanking sequ
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Example 16; Fig 19; 232pp: English.

Example 16; Fig 19; 232pp: English.

Example 16; Fig 19; 232pp: English.

The Sequences given in 067865.66 represent expression cassettes

containing the vaccinia H6 promoter and the human MAGE-1 gene which

containing the vaccinia H6 promoter and the human MAGE-1 gene which

containing the vaccinia H6 promoter and the human MAGE-1 gene which

containing the vaccinia H6 promoter and the construction of NYAC-

and ALVAC-based recombinant viruses containing the MAGE-1 gene. MAGE-1

ci s expressed in primary melanoma tumour cells, melanoma-derived cell.

colls except in testis. A first PCR fragment containing the last 18 bp.

and the initial 24 nucleotides of the MAGE-1 gene was generated and the initial 24 nucleotides of the MAGE-1 gene was generated and ilgated to a second PCR fragment amplified from plasmid pT218RAAGE1

which contains the initial 546 bp of the MAGE-1 coding sequence. The terminal sequence of MAGE-1 was amplified and a fusion product was the machine finitial and the H6 promoter and the full length MAGE-1 sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This construct may be introduced in to the poxvirus derived plasmids, ALVAC and NYVAC. The resulting viruses may be used in a composition for inducing an antigenic or immunological response, ie. for immunisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        H6/MAGE-1 expression cassette from vCP235.
Polymerase chain reaction; primer; amplify; NYVAC; ALVAC; recombinant; human; MAGE-1; meLanoma-associated antigen; MZ2-E; testis; pT218RWAGE1; primary melanoma tumour cell; melanoma-derived cell line; tumour; poxvirus; antigenic response; immunological response; pathogen; ss. Synthetic.
                                                                                                                                                                                                                                                                                                                               4411 CTCCTATGATGGCCTGCTGGGTGATAATCAGATCATGCCCAAGACAGGCTTCCTGATAAT 4470
                                                                                                   4471 TGTCCTGGTCATGATTGCAATGGAGGGCGGCCATGCTCGTGAGGAGAAATCTGGGAGGA 4530
                                                                                                                                                                                    4531 GCTGAGTGTGATGGAGGTGTATGATGGAGGGAGCACACAGTGCCTATGGGGAGCCCAGGAA 4590
                                                                                                                                                                                                                                                                                                          949 GATCCCGCACGCTATGAGTTCCTGTGGGGTCCAAGGGCCCTCGCTGAAACCAGCTATGTG 1008
                                                                                                                                                                                                                                             GCTGAGTGTGATGGAGGTGTATGATGGGAGGAGCACAGTGCCTATGGGGAGCCCAGGAA
                                                                                                                                                                                                                              GCTGCTCACCCAAGATTTGGTGCAGGAAAAGTACCTGGAGTACGGCAGGTGCCGGACAGT
Cox WI, Paoletti E, Tartaglia J;
WPI; 94-263767/32.
Attenuated recombinant virus used for cancer therapy - comprises
                                                                                273 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  inducing an antigenic or immunological response, ie. against pathogens.
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Q67865 standard; DNA; 1094 BP.
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/note- "Vaccinia H6 promoter"
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21-JAN-1994; U00888.
21-JAN-1993; US-007115.
19-JAN-1994; US-184009.
(VIRO-) VIROGENETICS CORP.
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/note= "Flanking sequence"
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/product= MAGE-1
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                                                                                                                                                                                                                                                                               Attendated recombinant virus used for cancer therapy - comprises

PNA encoding cytckine and/or tumour associated antigen

Example 16; Fig 20; 232pp; English.

Example 16; Fig 20; 232pp; English.

Containing the vaccinia H6 promoter and the human MAGE-1 gene which encodes human melanoma-associated antigen M22-E, in VCP235 and pMAW037, respectively. These sequences were used in the construction of NYVAC- and ALVAC-based recombinant viruses containing the MAGE-1 gene. MAGE-1 is expressed in primary melanoma tumour cells, melanoma-derived cell inse and certian tumours of non-melanoma origins but not in normal cells except in testis. A first PCR fragment containing the last 18 bp and the initial 24 uncleotides of the MAGE-1 gene was generated and igated to a second PCR fragment amplified from plasmid pT218RMGE1 which contains the initial 546 bp of the MAGE-1 coding sequence. The terminal sequence of MAGE-1 was amplified and a fusion product was generated containing the H6 promoter and the full length MAGE-1 sequence. This construct may be introduced in to the poxyirus derived plasmids, the construct may be introduced in to the poxyirus derived plasmids, the full construct may be introduced in to the poxyirus derived plasmids, the full construct may be introduced in to the poxyirus derived plasmids, the full construct may be introduced in to the poxyirus derived plasmids.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCTCAGGGAGCCTCCGCCTTTCCCACTACCATCAACTTCACTCGACAGAGGCAACCCAG 4110
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 inducing an antigenic or immunological response, ie. for immunisation against pathogens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            229 GGCCCAACAAGAGGCCCTGGGCCTGGTGTGTGCAGGCTGCCACCTCCTCCTCCTCTCC 288
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                                                                                                                                                            21-JAN-1994; U00888.
21-JAN-1993; US-007115.
19-JAN-1994; US-184009.
VINC-) VIROGENETICS CORP.
COX WI, PROJECTI E, Tartaglia J;
WPI; 94-263767/32.
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/note= "Flanking sequence"
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Matches 781; Conservative
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/product= MAGE-1
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13-OCT-1994.
17-MAR-1994; U02877.
26-MAR-1993; US-0373
/*tag= a
WO9423031-A.
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                                               22-JUN-1995 (first entry)
Tumour rejection antigen MAGE-41 gene.
Tumour rejection antigen; melanoma antigen-41; MAGE-41; MAGE-3; cancer; cytolytic T cells; antigen D; human leucocyte antigen;
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      Length 1094;
                       0; Indels
      Score 781; DB 1;
Pred. No. 0.00e+00;
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Tumour rejection antigen MAGE-4 gene.
Tumour rejection antigen; melanoma antigen-4; MAGE-4; MAGE-3;
cancer; cytolytic T cells; antigen D; human leucocyte antigen;
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625. .1578
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Q72482 standard; DNA; 2531
Q72482;
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26-MAR-1993; US-037230.
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PP 26-MAY-1991; US-705702.
PR 23-MAY-1991; US-705702.
PR 23-MAY-1991; US-705702.
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PR 23-SEP-1991; US-764364.
PR 23-SEP-1991; US-807043.
PR 21-SEP-1991; US-807043.
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tumor rejection antigen precursor; MAGE; antigen E; gene family; ss.
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tumor rejection antigen precursor; MAGE; antigen E; gene family; ss.
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                                                 CTGAGTCAGCAGGTCCTCCCCAGAGTCCTCAGGGAGCCTCTGCCTTACCCACTACCATCA
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Q32357 standard; cDNA; 2531
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22-APR-1993 (first entry)
MAGE-4 gene.
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Nucleic acid mol. encoding a human tumour rejection antigen

Precursor - useful as an immunostimulant in a vaccine for

Precursor - useful as an immunostimulant in a vaccine for

Inteating and preventing cancers, also useful in diagnosis

Disclosure; Page 79-80; 142pp; English.

The sequences given in 032352-69 represent a new family of genes

refered to as melanoma antigens (MAGE). The CDNAs of this gene

family were identified during the isolation of the antigen E GDNAs, when tested, did not transfer expression of antigen

E, but they did show substantial homology to the antigen E GDNA

sequence. The MAGE DNAs share a certain degree of homology with each

cther and are expressed in tumour cells including several types of

human tumor cells as well as in human tumors. MAGE expression is not

restricted to melanomas. MAGE refers to a family of tumor rejection

referred to as MAGE TRAs or melanoma antigen tumor rejection antigens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ch 69.8%; Score 580; DB 1; Length 253
1 Similarity 87.0%; Pred. No. 0.00e+00;
688; Conservative 0; Mismatches 102; Indels
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                                                                            (LUDW-) LUDWIG INST CANCER RES.
Boon T, Chomez P, De Plaen E, Lurquin C, Traversari
Van Den Eydede B, Van Der Bruggen P, Van Pel A;
WPI; 92-415460/50.
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09-JUL-1991; US-728838.
23-SEP-1991; US-764364.
12-DEC-1991; US-807043.
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US-08-190-411A-1.rng

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CTTGATTCATTTTCTGCTCCTCAAGTATTAAGTCAAGGAGCCGGTCACAAAGGCAGAAAT
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Treating and preventing cancers, also useful in diagnosis

Treating and preventing cancers, also useful in diagnosis

Disclosure; Page 86-87; 142pp; English.

The sequences given in 032352-69 represent a new family of genes

refered to as metanoma antigens (MAGE). The cDNAs of this gene

family were identified during the isolation of the antigen E gene.

The MAGE cDNAs, when tested, did not transfer expression of antigen

E, but they did show substantial homology to the antigen E cDNA

sequence. The MAGE DNAs share a certain degree of homology with each

cher and are expressed in tumour cells including several types of

human tumor cells as well as in human tumors. MAGE expression is not

restricted to melanomas. MAGE refers to a family of tumor rejection

antigen precursors. The antigens resulting from these genes are

referred to as MAGE TRAs or melanoma antigen tumor rejection antigens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2;
1394 TGGAGTACCGGCAGGTACCCGGCAGTAATCCTGCGCGCTATGAGTTCCTGTGGGGTCCAA 1453
                  4626 TGGAGTAC-GGCAGGTGCCGGACAGTGATCCCGCACGCTATGAGTTCCTGTGGGGTCCAA 4684
                                                                1454 GGGCTCTGGCTGAAACCAGCTATGTGAAAGTCCTGGAGCATGTGGTCAGGGTCAATGCAA 1513
                                                                                4685 GGGCCCTCGCTGAAACCAGCTATGTGAAAAGTCCTTGAGTATGTGATCATCAGGTCAGTGCAA 4744
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                                                                                                                                                                                                                                                            22-APR-1993 (first entry)
AAGE-51 genomic DNA.
melanoma antigen; MAGE TRA; melanoma antigen tumor rejection antigen;
tumor rejection antigen precursor; MAGE; antigen E; gene family; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (LUDW-) LUDWIG INST CANCER RES.
Boon T. Chomez P. De Plaen E, Lurquin C, Trave.
Man Den Eynde B, Van Der Bruggen P, Van Pel A;
WPI; 92-415460/50.
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645. .992
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Q32361 standard; DNA; 2305 BP
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86.4%;
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les 633; Conservative
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23-MAY-1991; US-705702.
09-UUL-1991; US-728838.
23-SEP-1991; US-764364.
12-DEC-1991; US-807043.
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Sequence 2305
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WO9220356-A.
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GCTGGAGAGCGTCATCAAAATTACAAGCGCTGCTTTCCTGAGATCTTCGGCAAAGCCTC
                                                                  GCACAGTGTCTGTGGGGAGCCCAGGAAGCTGCTCACCCAAGATTTGGTGCAGGAAAACTA
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Release 2.1D John F. Collins, Biocomputing Research Unit. Copyright (c) 1993, 1994, 1995 University of Edinburgh, U.K. Distribution rights by IntelliGenetics, Inc.

n.a. - n.a. database search, using Smith-Waterman algorithm MPsrch_nn Tue Apr 7 22:00:50 1998; MasPar time 18.26 Seconds 1024.763 Million cell updates/sec Run on:

Tabular output not generated.

>US-08-190-411A-1 (57-219) from 5541104.seq 163 Title:

57 ACCCATCCAAACATCTTCAC......TCGGTCTGAGGGCGGCGTTG 219
TGGGTAGGTTTGTAGAAGTG......AGCCAGACTCCCCGCCGAAC Description: Perfect Score: N.A. Sequence:

TABLE default Gap 6 Scoring table:

Dbase 0; Query 0 •• STD Nmatch 159649 seqs, 57412152 bases x 2 Searched:

Minimum Match 0% Listing first 45 summaries Post-processing:

Database:

1:n-geneseq1 n-genesed30

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Mean 7.397; Variance 4.240; scale 1.745

Statistics:

SUMMARIES

		æ			CONTRACTOR		
Sc	Score	Query Match	Length DB	DB	Ω	Description	Pred. No.
!	163	100.0	5674	: -	032352	MAGE-1 nucleic acid.	4.43e-98
	163	100.0	5674		972477	Tumour rejection antiq	4.43e-98
	163	100.0	5724		098902		4.43e-98
	71	43.6	4157	-	072478	Tumour rejection antiq	1.23e-32
	71	43.6	4157	Н	032353	MAGE-2 dene.	1.23e-32
	70	42.9	662	Н	032354	MAGE-21 qene.	5.95e-32
	70	42.9	662	-	072479	Tumour rejection antiq	5.95e-32
	44	27.0	66	-	051746	Oligonucleotide probe	1.27e-14
	36	22.1	66	-	051746	Oligonucleotide probe	1.40e-09
	33	20.2	204	Н	N81164	Base substituted E.col	9.49e-08
	32	19.6	186	Н	T76405	Human endothelin-1 ant	3.80e-07
	31	19.0	122	ч	Q70468	Generic DNA sequence t	1.50e-06
	30	18.4	122	-	070467	Generic DNA sequence t	5.87e-06
	30	18.4	204	-	N81164	Base substituted E.col	5.87e-06
	30	18.4	1055	Н	010572	Human Natriuretic Pept	5.87e-06
	53	17.8	122	H	070467	Generic DNA sequence t	2.27e-05
	53	17.8	122	-	070468	Generic DNA sequence t	2.27e-05
	5	17.8	122	Н	070465	Generic DNA sequence t	2.27e-05
	28	17.2	122	Н	Q70470	Generic DNA sequence t	8.63e-05
	28	17.2	122	-	070469	Generic DNA sequence t	8.63e-05

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Gaps

0;

Score 163; DB 1; Length 5674; Pred. No. 4.43e-98; 0; Mismatches 0; Indels 0

Query Match
Best Local Similarity 100.0%;
Matches 163; Conservative

retic Pept 8 sequence t 1 sequence t 1 sequence t 4 sequence t 4 sequence t 1	DNA DNA DNA DNA DNA DNA TLE an TEL I CC P CC P CC P CONA CLOPE CONA CONA CONA CONA CONA CONA CONA CONA	LIGNMENTS BP. melanoma antigen tumor rejection antigen; ursor; MAGE; antigen E; gene family; ss.	TEER RES. Italia by Van Pel A; Italia a human tumour rejection antigen In minunostimulant in a vaccine for Italiantant and a vaccine for Italiantantant in a vaccine for Italiantantantantantantantantantantantantanta
Q10572 Q70465 Q70466 Q70472 T76452 Q70466	070409 070441 070471 070473 176623 176623 176623 176623 176623 176623 176623 176623 176623 176624 176624 176624		os fire propagation and so
	122 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ALIGNME ard; DNA; 5674 BP. (first entry) ic acid. igen; MAGE TRA; melano ion antigen precursor; . Location/Qualifier 38814711 U04354. US-705702. US-728838. US-728838.	CAN.
17.	22222222222222222222222222222222222222	tand 993 ucle ant ject ject 1992. 991; 991;	12-109-10 UDDWIG INST BOON T, Chomez P, De Van WPI; 92-415466/50. Nucleic acid mol. en precursor - useful a trreating and prevent. Disclosure; Page 71-7he sequences given refered to as melanor family were identified family were identified family were identified to be when E, but they did show sequence. The MAGE other and are expressionant tumor cells as human tumor cells as restricted to melanor antigen precursors. referred to as MAGE. See also 032331. See also 032331.
	22	11.T 1 03.3352 s 03.2352; 22.APR-11 MAGE-1 nn melanoma tumor rejumor r	12-DEC-1991; or (LUDW-) LUDWIC BOON T, Chomez Wan Den Eynde WNI; 92-415460 Nucleic acid n precursor - us precursor - us frainly were policious and are human tumor cerestricted to antigen precurs restricted to antigen precurs referred to antigen precurs referred to antigen precurs see also 032355 Sequence 567
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Location/Qualifiers
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                                                                                                                                CCTGCTCTCAACCCAGGGAAGCCCAGGTGCCCAGATGTGACGCCCACTGACTTGAGCATTA 176
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Treatment and diagnosis of cancer
Example 26; Page 59: 105pp; English.

O72477 is the DNA sequence which encodes melanoma antigen-1
(MAGE-1). Another melanoma antigen MAGE-3 is encoded by 072470, this is a tumour rejection antigen MAGE-3 is encoded by 072470, this is a tumour rejection antigen MAGE-3 can be detected, or monitored, by contacting a test sample with an agent that can recognise MAGE-3. The melanoma can be treated by the administration of cytolytic T cells specific for the complex of antigen D (the mature rejection antigen derived from MAGE-3) and a human leucocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                           ACCCATCCAAACATCTTCACGCTCACCCCCAGCCCAAGCCAGGCAGAATCCGGTTCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Van DER BRUGGEN P;
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                                                                                                                                                                                                                                                                                                                                                                                                                                             Tumour rejection antigen MAGE-1 encoding DNA.

Tumour rejection antigen; melanoma antigen-1; MAGE-1; MAGE-3;
cancer; cytolytic T cells; antigen D; human leucocyte antigen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
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Tumour rejection antigen (MAGE-1) gene.
Tumour rejection antigen; MAGE-1; monoclonal antibody; MAb;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 5674;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 177 GIGGITAGAGAGAGAGGGTTITCGGICTGAGGGGCGGCTTG 219
                                                                                                                                                                                                                                        GIGGITAGAGAGAGAGGGTTTTCGGTCTGAGGGGCGGCTTG 219
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Pred. No. 4.43e-98;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-OCT-1994.
17-MAR-1994; U02877.
26-MAR-1993; US-037230.
(LUDWIG INST CANCER RES.
(LUDWIG INST CANCER RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1644 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers 3881. .4711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
3881. .4711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             immunoassay; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1276 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   T
Q98902 standard; DNA; 5724 BP.
                                                                                                                                                                                                                                                                                                                                                                      Q72477 standard; DNA; 5674 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Match 100.0%;
Local Similarity 100.0%;
tes 163; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                 Q72477;
22-JUN-1995 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antigen (esp. HLA-A1).
Sequence 5674 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             diagnosis; in
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /*tag= a
WO9423031-A.
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                                                   27
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Matches

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P 13-OCT-1994; UO2877.

R 26-MAR-1994; UO2877.

26-MAR-1999; US-037230.

1 Boon-falleur T, Gaugler B, Van DEN EYNDE B, Van DER BRUGGEN P; R WI; 94-333192/41.

New tumour rejection antigen precursor MAGE3 - useful in treatment and diagnosis of cancer S Example 3: page 61; 105pp; English.

S Example 3: page 61; 105pp; English.

C 072478 is the gene which contains the coding sequence for melanoma c antigen-2 (MAGE-2). Another melanoma antigen MAGE-3 is encoded by 072470, this is a tumour rejection antigen precursor. Melanomas characterised by the expression of MAGE-3 can be detected, or monitored, by contacting a test sample with an agent that can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      57 ACCCATCCAAACATCTTCACGCTCACCCCCAGCCCAAGCCAGGCAGAATCCGGTTCCACC 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               57 ACCCATCCAAACATCTTCACGCTCACCCCCAGCCCAAGCCAGGCAGAATCCGGTTCCACC 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTGCTCTCAACCCAGGGAAGCCCAGGTGCCCAGATGTGACGCCACTGACTTGAGCATTA 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 95-283606/37.

New monoclonal antibody binding specifically to MAGE-1 - useful for diagnosis and monitoring of cancer, also new hybridomas, recombinant MAGE-1 and immunogenic peptide(s)
Disclosure, Page 16-19; 33pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Amonoclonal antibody directed against the tumour rejection antigen (MAGE-1) can be used to detect MAGE-1 in samples by standard immunoassay methods for diagnosis and monitoring of cancer etc. The monoclonal antibody is designated MA454 and is produced by the hybridoma deposited as ATCC HBB11540. The monoclonal antibody is specific for MAGE-1, having no reactivity for MAGE-2 or MAGE-3. Peptide fragments of MAGE-1 (See R80618-20) may be useful as immunogens for production of the monoclonal antibody and antisera. Sequence 5724 BP; 1282 A; 1653 C; 1589 G; 1200 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.72478; 22-JUN-1995 (first entry) 22-JUN-1995 (first entry) Tumour rejection antigen MAGE-2 gene. Tumour rejection antigen for maintigen: maintigen: cancer; cytolytic T cells; antigen D; human leucocyte antigen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                         Old LJ, Rettig WJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 163; DB 1; Length 5724;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GIGGTIAGAGAAAGCGAGGITTICGGICIGAGGGGGGCGCTIG 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGGTTAGAGAGAAGCGAGGTTTTCGGTCTGAGGGGCGGCTTG 219
               /note= "The CDS is not indicated in the text of the specification but is suggested in the layout of the sequence."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 100.0%; Score 163; DB 1; Best Local Similarity 100.0%; Pred. No. 4.43e-98; Matches 163; Conservative 0; Mismatches 0
                                                                                                                                                                                                  10-AUG-1995.
05-JAN-1995, U00095.
05-JAN-1995; UC-190411.
(LUDW-) LUDWIG INST CANCER RES.
(SLOK ) SLOAN KETTERING INST CANCER RES.
(SLOK ) MEMORIAL SLOAN-KETTERING CANCER CENT.
SLOCKET E, Van der bruggen P; Old
/product= Tumour rejection antigen MAGE-1.
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200 TCGGTCTGAGGGGCGGCTTG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTTG 219
                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
WO9220356-A.
                                                                                                                                                                                                                                                                          MAGE-21 gene
                                                                                                                                                                                                                          Q32354;
22-APR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                26-NOV-1992.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    treating and preventing cancers, also useful in diagnosis
Disclosure: Page 74-75; 142pp: English.
The sequences given in 031352-69 represent a new family of genes
referred to as melanoma antigens (MAGE). The CDNAs of this gene
family were identified during the isolation of the antigen E gene.
The MAGE CDNAs, when rested, did not transfer expression of antigen
E, but they did show substantial homology to the antigen E cDNA
sequence. The MAGE DNAs share a certain degree of homology with each
other and are expressed in tumour cells including several types of
human tumor cells as well as in human tumors. MAGE expression is not
restricted to melanomas. MAGE refers to a family of tumor rejection
antigen precursors. The antigens resulting from these genes are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antigen precursors. The antigens resulting from these genes are referred to as MAGE TRAs or melanoma antigen tumor rejection antigens. See also Q32351.
                                                                                                                                                                                                                                                                          63 ACGG-GCCCGGATGTGACGCCACTGCACATTGGAGGTCAGAGGACAGCGAGATTC 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          melanoma antigen; MAGE TRA; melanoma antigen tumor rejection antigen;
tumor rejection antigen precursor; MAGE; antigen E; gene family; ss.
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                           140 cascificacatores acceptas actions and acceptas as a constant and a constant and a constant a
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        63 ACGG-GCCCGGATGTGACGCCCACTGCACATTGGAGGTCAGAGGACAGCGAGATTC 121
                                                                                                                                                                                                                                                 3 CATCCAGATCCCCATCCGGGCAGAATCCGGTTCCACCCTTGCCGTGAACCCAGGGAAGTC 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         62
recognise MAGE-3. The melanoma can be treated by the administration of cytolytic T cells specific for the complex of antigen D (the mature rejection antigen derived from MAGE-3) and a human leucocyte
                                                                                                                                                                                                    1; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31; Indels 1; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 CATCCAGATCCCCATCCGGGCAGAATCCGGTTCCACCCTTGCCGTGAACCCCAGGGAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         885 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Van Den Eynde B, Van Der Bruggen P, Van Pel A;
Warl: 92-415460/50.
Nucleic acid mol. encoding a human tumour rejection antigen
precursor useful as an immunostimulant in a vaccine for
                                                                                                                                                    1; Length 4157;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 4157;
                                                                                                                                               Score 71; DB 1; Length 4157
Pred. No. 1.23e-32;
0; Mismatches 31; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Boon T, Chomez P, De Plaen E, Lurquin C, Traversari C;
Van Den Eynde B, Van Der Bruggen P, Van Pel A;
                                                                                                  1185 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1184 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 71; DB 1; I
Pred. No. 1.23e-32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1135 C;
                                                                                                  1134 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
2958. .3542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (LUDW-) LUDWIG INST CANCER RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LT 5
Q32353 standard; DNA; 4157 BP.
Q32353;
                                                                                                  953 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                122 TCGCCCTGAGCAACGGCCTG 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      200 TCGGTCTGAGGGCGGCTTG 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         953 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       43.68;
                                                                                                                                                    43.68;
                                                                                                                                                                          Best Local Similarity 77.1%;
Matches 108; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-APR-1993 (first entry)
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les 108; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-MAY-1992; U04354.
23-MAY-1991; US-705702.
09-UUL-1991; US-728838.
23-SEP-1991; US-764364.
12-DEC-1991; US-807043.
                                                                           antigen (esp. HLA-A1).
Sequence 4157 BP:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4157 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /*tag= a
W09220356-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MAGE-2 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-NOV-1992
                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                      Query Match
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treating and preventing cancers, also useful in diagnosis

Disclosure; Page 76; 142pp; English.

The sequences given in 03235.69 represent a new family of genes

The sequences given in 03235.69 represent a new family of genes

Tefered to as melanoma antigens (MAGE). The CDNAs of this gene

Tefered to as melanoma antigens (MAGE). The CDNAs of this gene

The MAGE CDNAs, when tested, did not transfer expression of antigen

E, but they did show substantial homology to the antigen E CDNA

Sequence. The MAGE DNAs share a certain degree of homology with each

C sequence. The MAGE DNAs share a certain degree of homology with each

C ther and are expressed in tumour cells including several types of

Numan tumor cells as well as in human tumors. MAGE expression is not

restricted to melanomas. MAGE refers to a family of tumor rejection

The antigen precursors. The antigens resulting from these genes are

The antigen precursors are melanoma antigen tumor rejection antigens.

Secuence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        214
140 CAGGTGCCCAGATGTGACGCCACTGACTTGAGCATTAGTGGTTAGAGAGAAGCGAGGTTT 199
                                                                                                                                                                                                                                                                                                                                                                  melanoma antigen; MAGE TRA; melanoma antigen tumor rejection antigen;
tumor rejection antigen precursor; MAGE; antigen E; gene family; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95 CCAGGCAGAATCCGGTTCCACCCCTGCTCTCAACCCCAGGAAGCCCAGGTGCCCAGATGT 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         74 GACGCCACTGACTTGCGCGTTGGAGGTCAGAGAACAGCGAGATTCTCGCCCTGAGCAACG 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15 CCAGGAAGAATCCAGTTCCACCCTGTGTGAACCCAGGGAAGTCACGGGGCCG-GATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tumour rejection antigen MAGE-21 gene.
Tumour rejection antigen; melanoma antigen-21; MAGE-21; MAGE-3;
cancer; cytolytic T cells; antigen D; human leucocyte antigen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 92-415460/50.
Nucleic acid mol. encoding a human tumour rejection antigen
precursor - useful as an immunostimulant in a vaccine for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   87 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 70; DB 1; Length 662;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches 24; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-MAY-1992; U04354.
23-MAY-1992; U5-705702.
09-JUL-1991; US-705702.
23-SEP-1991; US-764364.
12-DEC-1991; US-807043.
12-DEC-1991; US-BOTORT CANCER RES.
BOON T, Chomez P, De Plaen E, Lurquin C, Traversari C; Van Den Eynde B, Van Der Bruggen P, Van Pel A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      176 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              No. 5.95e-32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      244 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred.
                                                        122 TCGCCCTGAGCAACGGCCTG 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q72479 standard; DNA; 662 BP.
                                                                                                                                                                                                                                              BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      155 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 42.9%;
Best Local Similarity 80.0%;
Matches 100; Conservative
                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q72479;
22-JUN-1995 (first entry)
                                                                                                                                                                                                              .r 6
Q32354 standard; DNA; 662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9423031-A.
13-OCT-1994.
17-MAR-1994; U02877.
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MK14 but

- used for

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claim 3; Page 14; 23pp; English.
Oligonucleotide probe MK14-A consists of nucleotides 5-95 of (051735). It hybridized to all spp. of mycobacteria tested, cross reacted to a few non-mycobacterial spp. The probe may be useful as an initial screen for mycobacterial infection. See also Q51735-45 and Q51747-59. 17 C; 15 G; 4 T;
31-WAY-1994 (first entry)
Oligonucleotide probe MK14-A
Oligonucleotide; DNA probe; mycobacteria; disease diagnosis;
                                                                                                                                                                                                                Shank DD, Spears PA;
Shank DD, Spears PA;
WPI; 93-37844/48.
New oligo:nuclectide probes specific for Mycobacteria - used detection and amplification of Mycobacteria nucleic acid in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                              Synthetic.
EP-571911-A.
01-DEC-1993.
24-MAY-1993; 108325.
26-MAY-1992; US-889651.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (SUSO) SUOMEN SOKERI OY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-MAY-1988;
30-MAR-1988; 105163.
03-APR-1987; US-034819.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EP-285123-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                               sambles
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACGCCACTGACTTGCGCGTTGGAGGTCAGAGAACAGCGAGATTCTCGCCCTGAGCAACG 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15 CCAGGAAGAATCCAGTTCCACCCTGCTGTAAACCCAGGGAAGTCACGGGGCCG-GATGT 73
                                                                                           Treatment and diagnosis of cancer Discolaries and diagnosis of cancer Discoloure; Page 63; 105pp; English.

072479 is the gene which contains the coding sequence for melanoma antigen-21 (MAGE-21). Another melanoma antigen precursor. Melanomas 072470, this is a tumour rejection antigen precursor. Melanomas characterised by the expression of MAGE-3 can be detected, or monitored, by contacting a test sample with an agent that can recognise MAGE-3. The melanoma can be treated by the administration of cytolytic T cells specific for the complex of antigen D (the mature rejection antigen derived from MAGE-3) and a human leucocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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                                                      Van DER BRUGGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 CGSSVHSYYVVHVVSHHHSVHHVVHHVHVSVVVVHHVVHVVHHVHYHYYVSVCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 3; Page 14; 23pp; English.
Oligonucleotide probe MK14-A consists of nucleotides 5-95 of (Q51735). It hybridized to all spp. of mycobacteria tested, cross reacted to a few non-mycobacterial spp. The probe may be useful as an initial screen for mycobacterial infection. See also Q51735-45 and Q51747-59.
Sequence 91 BP; 5 A; 17 C; 15 G; 4 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New oligo:nucleotide probes specific for Mycobacteria - used detection and amplification of Mycobacteria nucleic acid in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-MAY-1994 (first entry)
Oligonucleotide probe MK14-A
Oligonucleotide; DNA probe; mycobacteria; disease diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                         87 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 662;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 44; DB 1; Length 99;
Pred. No. 1.27e-14;
45; Mismatches 6; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24; Indels
                                                                                                                                                                                                                                                                                                                                                                                         176 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 70; DB 1; L4
Pred. No. 5.95e-32;
0; Mismatches 24
    26-MAR-1993; US-037230.
(LDDW-) LUDDWIG INST CANCER RES.
Boon-falleur T, Gaugler B, Van DEN EYNDE B,
PED: 94-333192/41.
                                                                                                                                                                                                                                                                                                                                                                                         244 C;
                                                                                                                                                                                                                                                                                                                                                                                      155 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                   42.9%;
larity 80.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (BECT ) BECTON DICKINSON CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27.0%;
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Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17 8
Q51746 standard; cDNA; 91
Q51746;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ULT 9
Q51746 standard; cDNA; 91
Q51746;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
EP-571911-A.
01-DEC-1993.
24-MAY-1993; US-889651.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Spears PA;
                                                                                                                                                                                                                                                                                                                                                                  antigen (esp. HLA-Al)
Sequence 662 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
Matches 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
nes 100; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Shank DD, Spears
WPI; 93-378844/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           215 GCTTG 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              134 GCCTG 138
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ID 05
AC 05
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Introducing random point mutations into nucleic acods -
Introducing random point mutations into nucleic acods -
Introducing random point mutations into nucleic acods -
Introducing random completion of molecules and screening.
Insincorporation, completion of molecules and screening.
Insincorporation, completion of molecules and screening.
Insincorporation mutations were introduced into the alpha fragment of
E.coli beta galactosidase. The wild type sequence was obtained as a single stranded template and an oligonucleotide was hybridised to
it to generate a popn of DNA molecules which terminate at all possible nucleotide positions within a specified region. The variable 3' ends generated in this way are used as primers for reverse transcriptase and the molecules are misincorporated by the transcriptase and the molecules are completed to forms that can be amplified and then expressed in a suitable host-vector system.
The sequence covers all 176 difft base substitutions, most of which courred singularly in any given mutant.
See also P80575.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
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                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                           08-Nov-1990 (first entry) assess by tragment. Base substituted E.coli beta-galactosidase alpha-fragment. E.coli beta galactosidase alpha-fragment; base substitutions; ss. Escherichia coll.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 33; DB 1; Length 204; Pred. No. 9.49e-08; 51; Mismatches 39; Indels
                                                                                                                                                                         114 CGCCCTCAGACCGAAAACCTCGCTTCTCTAAACCACTAATGCTCAA 167
                                                                6; Indels
                                                                                                                                Length 99;
                              Pred. No. 1.40e-09;
22.1%; Score 36; DB 1; 4.2%; Pred. No. 1.40e-0
                                                                   40; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /function-multiple cloning site
primer_bind 187. .204
                                                                                                                                                                                                                                                                                                .T 10
N81164 standard; DNA; 204 BP.
N81164;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20.2%;
imilarity 7.2%;
7; Conservative
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Best Local Similarity
Matches 7; Conser
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BP.

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PPROBLEM RASISA.

PRENELLIFYING Proteins or peptide(s) which bind a ligand - by
recenting a recombinant vector library expressing fusion proteins

PT comprising a binding domain and an effector domain
Disclosure: Page 35: 255pp: English.

COMPAGE 1s a generic DNA Sequence used to generate random TSAR (Totally
Synthetic Affinity Reagents) peptides. This generic formula can also be
CC Synthetic Affinity Reagents) peptides. This generic formula can also be
crepresented as follows: X(NNB)11(TGC)(NNB)62(NNB)7(TGC)(NNB)10Y. X
and Y are flanking restriction Sites (X is not the same as Y) that are
CC onto specific peptides generated by these generic sequences are shown in
CC CShar specific peptides operated by these generic sequences are shown in
CC comprising at least two functional regions - a binding domain with
CC flantly for a ligand and a second effector peptide portion that is
CC chart the expressed peptide contains 2 or 4 cysteine residues positioned
CC that the expressed peptide contains 2 or 4 cysteine residues positioned
CC in a compsis. Comprising a TSAR binding domain can be used in vivo to
CC comprising a TSAR binding domain can be used in vivo to
CC comprising a TSAR binding domain can be used in vivo to
CC radioisotope, peptide, toxin or enzyme, to the specific target or on the
CC all. They can also replace the function of macromolecules, eg.
CC comprision or mithodias and therefore circumvent the need
CC for complex methods of hybridoma formation or in vivo antibody
CC allowing direct and rapid detection in a screening process.
Sequence 114 BP; 0 A; 2 C; 2 C; 2 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 NBNNNNNNNNNNNNBNNBNNBNNBNNBNNBTGCNNBNNBNNBNNBNNBNNBNNBNNBN 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           186 CICIAACCACIAAIGCICAAGICAGIGGCGICACAICIGGGCACCIGGGCIICCCIGGGI 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 126 TGAGACCAGGGGTGGAACCGGATTTCTGCCTTGGGCTGGGGGTGAGGTGAAGATGT 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Generic DNA sequence to generate a random TSAR petide library.

TSAR: totally synthetic affinity reagent; synthetic; binding domain; effector domain; concateneated heterofunctional protein; linker; direct; rapid; detection; screening; treatment; generic; ss. Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 31; DB 1; Length 122;
Pred. No. 1.50e-06;
34; Mismatches 84; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag= a
/note= "this sequence represents 'Z'; Z can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6, 9 or 12 nucleotides (see
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q70467 standard; DNA; 114 BP.
                                                                   (UYNC-) UNIV NORTH CAROLINA. Fowlkes DM, Kay BK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19.0%;
Similarity 3.3%;
4; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                55. .60
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US-176500.
US-189331.
01-FEB-1993; US-013416.
30-DEC-1993; US-176500.
31-JAN-1994; US-189331.
                                                                                           Fowlkes DM, Kay BK;
WPI; 94-279739/34.
P-PSDB; R65154.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
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30-DEC-1993;
31-JAN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           070467;
05-APR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                misc_feature
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01-FEB-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 seguence of
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WO9418318-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               65
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       셤
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A method for treating airway disease in a subject has been produced, which involves the topical administration of an essentially adenosine free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide specific for the human endothelin-1, targeted at the initiation codon. The method can be used to treat airway diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary diseases, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON, its liberation upon antisense degradation is prevented, thereby preventing adenosine-induced bronchoconstriction in patients with hyper-reactive airways. Sequence 178 BP; OA; 52 C; 46 G; 32 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           113 CBBGCCBCBBCBGCBGBGBBBBTCBTGBGCBBBTBBTCCBTTCTGBBBBBBBGGGBT 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     92 HHYRRMRBNVYRDYNRSDAAAWYCCYRRSVKYDCCYNACHHDDHYVYBBBVYNVHNHNNC 151
                                                                        204 ACCGAAAACCTCGCTTCTCTCTAACCACTAATGCTCAAGTCAGTGGCGTCACATCTGGGC 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Generic DNA sequence to generate a random TSAR petide library. TSAR; totally synthetic affinity reagent; synthetic; binding domain; effector domain; concateneated heterofunctional protein; linker; direct; rapid; detection; screening; treatment; generic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Treatment of airway diseases such as asthma - by topically applying adenosine-free antisense oligo:nucleotide to airway epithelium of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                15-SEP-1997 (first entry)

Human endothelin-1 antisense oligonucleotide.

Asthma; airway epithelium; adenosine free; cystic fibrosis; chronic obstructive pulmonary disease; bronchitis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 32; DB 1; Length 186;
Pred. No. 3.80e-07;
31; Mismatches 17; Indels
                                                                                                                                               152 NCCCBNNHVCHNVHBNNHRNWAYVRHDARRDDVHCCV 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q70468 standard; DNA; 114 BP. Q70468;
                                                                                                                                                                                                                                   T 11
T76405 standard; DNA; 178 BP.
T76405;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-JUN-1996; U09306.
07-JUN-1995; US-474497.
(UYEC-) UNIV EAST CAROLINA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19.6%;
27.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-APR-1995 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nyce JW;
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01-FEB-1994; U00977.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 97-051871/05.
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/note= "this
                                                                                                                                                                                                                                                                                                                                                                                                                                        19-DEC-1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Metzger WJ,
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Matches

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186 CCVCHC 191
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N-PSDB; Q10324.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LO-JAN-1991
                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Peptide
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                                                                                             PF-ESDB: R65153.

PT HORDING ALZ/1/39/34/4.

PP-ESDB: R65153.

Identifying proteins or peptide(s) which bind a ligand - by learning a recombinant vector library expressing fusion proteins proceeding a recombinant vector library expressing fusion proteins promprising a binding domain and an effector domain proceeding a binding domain and an effector domain bisclosure; Page 35; 255pp; English.

CC 070467 is a generic DNA sequence used to generate random TSAR (Totally Sprinteric Affinity Reagents) peptides. This generic formula can also be represented as follows: X(NNB)16(TGC)(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NNB)12(NN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 165 TCAGTGGCGTCACATCTGGGCACCTGGGCTTCCCTGGGTTGAGAGCAGGGGTGGAACCGG 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 88-279927/40.
Introducing random point mutations into nucleic acods -
by prepn of single stranded template, annealing a primer, elongation,
misincorporation, completion of molecules and screening.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; p; English. Random point mutations were introduced into the alpha fragment of E.coli beta-galactosidase. The wild type sequence was obtained as single stranded template and an oligonucleotide was hybridised to it to generate a popn of DNA molecules which terminate at all
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-NoV-1990 (first entry)
asse substituted E.coli beta-galactosidase alpha-fragment.
E.coli beta galactosidase alpha-fragment; base substitutions; ss.
Escherichia coli.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
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03-APR-1987; US-034819.
(SUSO) SUOMEN SOKERI OY.
Lebtovaara P. Knowles J. Koivula A. Bamford J. Reinikainen T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 122;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          105 ATTCTGCCTGGCCTGGGGGTGAGCGTGAAGATGTTTGGATGGT 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       33; Mismatches 75; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 30; DB 1; L. Pred. No. 5.87e-06;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18.4%;
UNIV NORTH CAROLINA DM, Kay BK:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19. .69
                                              WPI; 94-279739/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
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EP-285123-A.
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                  (UYNC-) UFOWlkes I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N81164;
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Matches
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126 CYNACHHDDHYVYBBBVYNVHNHNNCNCCCBNNHVCHNVHBNNHRNWAYVRHDARRDDVH 185
                                                                                                                                                                                                                                                                                                                                                                           possible nucleotide positions within a specified region. The variable 3' ends generated in this way are used as primers for reverse transcriptase. Nucleotides are misincorporated by the transcriptase and the molecules are completed to forms that can be amplified and then expressed in a suitable host-vector system. The sequence covers all 176 difft base substitutions, most of which occurred singularly in any given mutant.
                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human Natriuretic Peptide Receptor B.
NPRB; ANP; BNP; CNP; kidney failure; heart failure; protein kinase;
hyperaldosteronism; glaucoma; guanyl cyclase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Natriuretic protein receptor B - for diagnosis and treatment of kidney failure, heart failure, hyperaldosteronism, glaucoma etc. Claim 3: Fig 1: 49pp; English.

The sequence was derived from the DNA encoding natriuretic peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      receptor B, NPRB, having guanyl cyclase (GC) activity and protein
                                                                                                                                                                                                                 11 T; 108 Others;
                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                      /label= extracellular domain
/note= "binds natriuretic peptides A,B and C]"
Domain 456. .456
                                                                                                                                                                                                                 17 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /label= cytoplasmic domain
/note= "GC and protien kinase activity"
Modified site 24. 26
/label= N.glycos_site
Modified - site 35. 37
                                                                                                                                                                                                               47 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   T 15
Q10572 standard; DNA; 1047 BP.
Q10572;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Domain 456. .456
/label= transmembrane domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chang M, Goeddel D, Lowe D; WPI; 91-036711/05.
                                                                                                                                                                                                                                                          18.48;
12.18;
                                                                                                                                                                                                               21 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-APR-1991 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /label= N-glycos_site
fodified -site 600..607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        479. .1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /label= N-glycos_site
Modified -site 244. .246
                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . .163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /label= N-glycos_site
Modified -site 161, 16
/label= N-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peptide 1. .22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /label= N-glycos_site
Modified -site 195.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /label= N-glycos_site
Modified -site 277...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /label= N-glycos_site Addified -site 349. .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /label= N-glycos_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-JUN-1990; U03586.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     label= mature NPBR
                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                               204 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Modified -site
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CC kinase activity. The DNA can be inserted into expression vectors CC for the prode. of the protein, opt. after being mutated to produce CC NPRB analogues. The protein has a mol wt. of 115 kD (calculated Mr-CC 114,952). The protein (or variants) can be used in treatment of CC affinity chromatography. Antibodies with affinity for NPRB can CC also be prepd. 87 A; 15 C; 83 G; 51 T;

Query Match 18.4%; Score 30; DB 1; Length 1055; Best Local Similarity 13.3%; Pred. No. 5.87e-06; Matches 19; Conservative 40; Mismatches 83; Indels 1; Gaps 1;
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g G දු පු දු

Search completed: Tue Apr 7 22:01:11 1998 Job time: 21 secs.

415 NAAHYSGANKNNWWTGRNNWWK 437

80 GAGCGTGAAGATGTTTGGATGG 58